



Personalized Cancer Care: Reducing Risks, Optimizing Outcomes

2016 ANNUAL REPORT

 **NorthShore**
University HealthSystem

Kellogg Cancer Center



Dr. David J. Winchester (left) and Dr. Bruce Brockstein

There is no one-size-fits-all protocol for cancer patients at NorthShore University HealthSystem (NorthShore) Kellogg Cancer Center. Our comprehensive, compassionate care starts with each individual patient and each patient's unique cancer.

Our collaborative teams of specialists work together to ensure optimal outcomes for all patients. Multidisciplinary clinics and case conferences allow us to cohesively and quickly provide patients and their families with an optimal treatment plan. As leaders in personalized medicine, our experienced Kellogg Cancer Center care team harnesses the latest technology and treatment advances to provide the highest level of care for even the most rare and aggressive cancers. From immunotherapy to analyzing tumor genetics for innovative clinical trials, we offer our patients the best and broadest options.

NorthShore has once again been recognized by the American Society of Clinical Oncology (ASCO) and its Quality Oncology Practice Initiative (QOPI) for meeting the highest standards for quality cancer care. Patient survival rates at Kellogg Cancer Center continue to compare favorably with national benchmarks as we diagnose and treat a growing number of patients drawn to Kellogg Cancer Center for superior care.

Kellogg Cancer Center is also a designated Blue Cross Blue Shield Blue Distinction Center for Complex and Rare Cancers. The Blue Distinction program recognizes hospitals with proven expertise in specialty care.

We are committed to continuous quality improvement and have joined the Commission on Cancer's Rapid Quality Reporting System (RQRS) designed to promote evidence-based care with access to real-time clinical performance data.

Pioneering research initiatives at NorthShore support our clinical care today and lay the groundwork for prevention and even better treatment options tomorrow and for generations to come. Our focus on translational research brings the latest findings from the lab to patients in our clinical sites on a daily basis.

Our academic affiliation with the University of Chicago Pritzker School of Medicine and our important alliance with Mayo Clinic further strengthen our clinical care and research efforts, including access to a broad array of clinical trials.

Philanthropic support is crucial to our mission to provide the best possible individualized care, and we are enormously grateful to all of our generous donors. Indeed, the Kellogg Cancer Center was established with wonderful support from the Kellogg family more than 30 years ago, and charitable contributions are more essential today than ever before.

We invite you to learn more about our commitment to excellence in personalized cancer care highlighted in this report.

Bruce Brockstein, MD

Medical Director
NorthShore Kellogg Cancer Center
Head, Division of Hematology/Oncology
Kellogg-Scanlon Chair of Oncology

David J. Winchester, MD

Chairman, NorthShore Cancer Committee
Associate Director for Surgical Specialties,
Kellogg Cancer Center

Personalized Cancer Care:

Reducing Risks, Optimizing Outcomes

Kellogg Cancer Center—A Unique Approach

At NorthShore Kellogg Cancer Center, personalized medicine is an increasingly important factor in both assessing an individual's risk for developing cancer and providing more precise treatment for each cancer patient. An emphasis on prevention, early detection and targeting therapy based on advanced diagnostics, combined with a comprehensive and compassionate team approach, are hallmarks of our personalized approach.

For those with a family history of certain cancers—including breast, colon or prostate—genetic testing can provide critical insight into their particular risk, which allows our team to provide proactive screening and individually tailored preventive measures to mitigate the risk of developing cancer. And for patients diagnosed with cancer, analysis of both germline and tumor DNA alterations can enable our experienced oncology specialists to develop targeted therapies related to the molecular biology of their specific cancer.

Advancing Immunotherapy

Among the most promising developments in cancer treatment in recent years is immunotherapy. For decades, researchers have been trying to understand why the body's immune system does not see cancer cells as foreign and attack them. Unlike chemotherapy, which attacks cancer cells, immunotherapy targets the patient's immune system, spurring the body's own immune function to unleash an attack on the disease. NorthShore has been an early adopter of immunotherapy, offering progressive treatment options to our patients and supporting ongoing clinical trials and research to further advance this revolutionary field.

We have seen success in both halting the spread of disease and in some cases shrinking or even completely eliminating tumors with immunotherapy. The list of cancers currently treated with immunotherapy is growing and now includes melanoma, lung, kidney, bladder, head and neck cancers and Hodgkin's lymphoma.

While not all patients respond positively to immunotherapy, we are encouraged by many remarkable cases. Our collaborative team of clinicians—in partnership with our experts in genomics, medical genetics, pathology, research informatics and more—are working together to find effective treatments for all cancer patients.

NorthShore is involved in a variety of clinical trials looking at new ways to use immunotherapy and other new approaches to enhance patient outcomes.

Improving Outcomes

New therapies and treatment options are increasingly emerging from research conducted by teams of physician-scientists at NorthShore's Center for Personalized Medicine. At what is now one of the most productive personalized medicine programs in the country, our clinicians and researchers are partnering to move discoveries from the laboratory to today's patient care and improved quality of life.

Our Personalized Oncology Clinic, led by Janardan Khandekar, MD, helps develop personally tailored treatments for newly diagnosed patients and those with advanced cancers. Patient data is also used to match individuals to the best available clinical trial options—both locally and nationally.

Program for Personalized Cancer Care

The mission of NorthShore's Program for Personalized Cancer Care (PPCC) is to improve quality of care by offering proactive and totally personalized cancer care, from individualized cancer prevention and screening strategy to customized treatment modalities of localized cancer and targeted cancer therapy of advanced cancer.

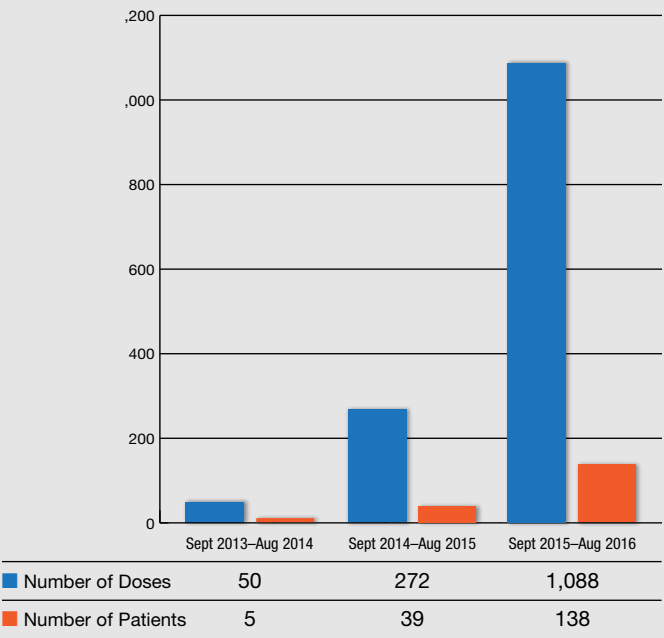
To promote our mission, we have developed a novel model, the Pyramid Model for Personalized Cancer Care. The Pyramid Model is based on the principle that personalized medicine should not be limited to treatment, and contains four tiers: (1) screening and prevention, (2) diagnosis, (3) early-stage disease and (4) late-stage disease.

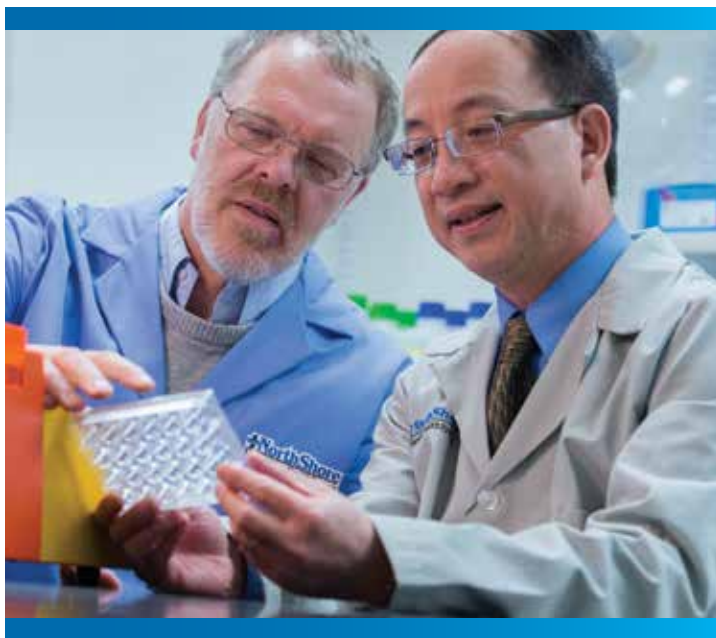
To successfully implement the Pyramid Model, our team has developed five DNA-based tests, which target the first three tiers of the Pyramid Model (i.e., screening and prevention, diagnosis and early-stage disease). These include (1) a genetic risk score test based on cancer risk-associated single nucleotide polymorphisms

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Exponential Growth in Use of Immunotherapies

This graph depicts the growth in doses of and patients receiving immunotherapeutic agents.





Dr. Simon Hayward (left) and Dr. Jianfeng Xu, with the Program for Personalized Cancer Care, are advancing early detection and effective treatment efforts for patients through our proprietary genetic risk score and ongoing research.

in inherited DNA; (2) the NorthShore Inherited Cancer Panel, which is a next-generation sequencing (NGS) panel that incorporates 222 cancer-associated high-penetrance genes as well as 616 cancer risk-associated single nucleotide polymorphisms in a single, low-cost assay; (3/4) assays that assess copy number alterations associated with aggressiveness in prostate and bladder cancer biopsy samples; and (5) a urine test that has been developed to detect DNA methylation associated with bladder cancer to distinguish which patients may actually have bladder cancer.

There are currently seven ongoing trials/studies led by members of the PPCC. These trials are all being conducted with physicians who specialize in cancers, including breast, prostate, colon, thyroid, pancreatic and lung. Most notably, we recently began recruiting for a test of genetic risk scores for breast, prostate and colorectal cancers among primary care patients. Soon to come will be a clinical study of our inherited cancer panel among 600 newly diagnosed cancer patients.

The PPCC received the prestigious Department of Defense Impact Award in 2015 to support a project of lethal prostate cancer in collaboration with the University of Michigan as well as Johns Hopkins University. Members of the PPCC have published more than 40 peer-reviewed manuscripts in high-impact journals, including *JAMA* and *Nature Communications*.

Center for Medical Genetics

As one of the largest and busiest adult genetic counseling programs in the country, NorthShore's Center for Medical Genetics began offering clinical testing for inherited breast cancer risk BRCA1 and 2 shortly after it became clinically available. Our Center is a recognized leader and was quick to adopt new germline testing for inherited cancers, which can help guide management, including treatment and screening options, in order to achieve the best outcomes for individual patients.

Directed by Peter Hulick, MD, the Center for Medical Genetics now is examining more than 70 genes possibly linked to breast and ovarian cancer to help identify and stratify family risk. Dr. Hulick's team has developed the SIFT (Susceptibility gene Identification in Families with a geneTic predisposition to breast cancer) Registry, which is designed to find new breast cancer susceptibility genes and ultimately help develop a clinical Next Generation Sequencing (NGS) test. This test will provide a more precise estimate of risk to guide patients in NorthShore's Breast Cancer Risk Assessment and Prevention Program.

Pharmacogenomics

NorthShore offers one of the few select Pharmacogenomics Clinics nationwide that pre-emptively provides genetic testing to help predict how patients will respond to certain drugs. Led by Mark Dunnenberger, PharmD, BCPS, our expanding Pharmacogenomics Clinic provides us with the resources to determine the best drug treatment for patients, tailored to their specific cancers. Ninety-five percent of patients have at least one variant that is "actionable" and can be translated to modified therapy.

Germline information can help with specific dosing for some chemotherapy agents and also can be useful in prescribing the most effective supporting medications, including anti-nausea and antifungal drugs designed to combat side effects. The potential for continued improvements and enhancement to patient care through pharmacogenomics is tremendous, and NorthShore's unique clinic provides significant benefits to our patients.

Leading-Edge Laboratory Medicine and Pathology

Personalized cancer care relies on both the precise interpretation and accurate data from the latest diagnostic technology. While today's advances in genomic testing have given rise to more tailored care, our pathology and laboratory medicine team led by Karen Kaul, MD, PhD, Chair of Pathology and Laboratory Medicine, has been ahead of the curve for decades in the use of advanced tumor diagnostics and DNA analysis to customize patient care. DNA sequencing of blood and tumors identifies key genetic patterns and mutations, leading to quicker and more accurate diagnosis and treatment recommendations. While patients treated at other institutions may have to wait weeks for a test to be sent out to a reference laboratory, we are able to conduct most of these studies in-house with a turnaround time of days, not weeks.

State-of-the-art next-generation sequencing (NGS) in our molecular diagnostics laboratory allows us to rapidly look at large genomic regions involved in cancer. Our lab's unique in-house sequencing capability allows us to screen many more cancer genes at once in a single assay. NGS also allows us to run the latest "hot spot" cancer panels, making it possible to more precisely identify rare somatic and germline mutations, cancer drivers, biomarkers and therapeutic targets for malignancies of all types—from lung and colon cancer to rare tumors not yet well characterized.

Performing these tests in-house means much faster results and quicker treatment for our patients. Direct communication of test results to physicians through our Electronic Medical Record (EMR) system is seamless and immediate. NorthShore's advanced instrumentation also enables our lab professionals to accurately analyze very small samples, including those from

needle biopsies, sparing patients from undergoing larger, more-invasive procedures. Patients with advanced lung cancer and others can undergo a fine-needle aspiration that will produce enough material for molecular profiling of their tumor.

Clonality assessment is a very powerful NGS tool for patients with leukemia and lymphoma that allows physicians to monitor patients' progress and to determine, in the case of an apparent relapse, if it is the original malignant process or a new leukemia or lymphoma. These very specific test results help guide personalized treatment and improve patient outcomes.

■ Molecular Tumor Board

The Molecular Oncology Committee evaluates new diagnostic testing and therapeutics, and regularly interacts with outside agencies to bring the latest genomic breakthroughs to our patients. Led by the Chief of Gastrointestinal Oncology, Robert Marsh, MD, this multidisciplinary committee brings together a broad base of expertise in basic science, clinical care, and research and genetics, and now also functions as a molecular oncology tumor board. This ensures that all cases presented at one of the many disease-specific Kellogg Cancer Center tumor

boards also can be analyzed and discussed on a molecular level when needed.

■ Genomic Health Initiative

NorthShore is leading a groundbreaking research study, the Genomic Health Initiative, that is collecting 100,000 DNA samples to understand the correlation between genomics and disease, paving the way to more effectively manage patients' health on a larger scale, including cancer risk and cancer treatment.

This pioneering initiative builds on our leading Electronic Medical Record (EMR) system and our extensive biobanks.

■ Personalized Cancer Care

A leader in integrated cancer care, NorthShore's Kellogg Cancer Center leverages the latest technology to analyze genetic makeup of individual tumors and design personalized care to provide the best possible outcomes. Patients are supported by multidisciplinary teams, including medical and surgical oncologists, pathologists, genetic specialists, nurses, pharmacists, clinical nutritionists, social workers, psychologists and more all focused on meeting individual patient needs.

Multidisciplinary Melanoma Clinic

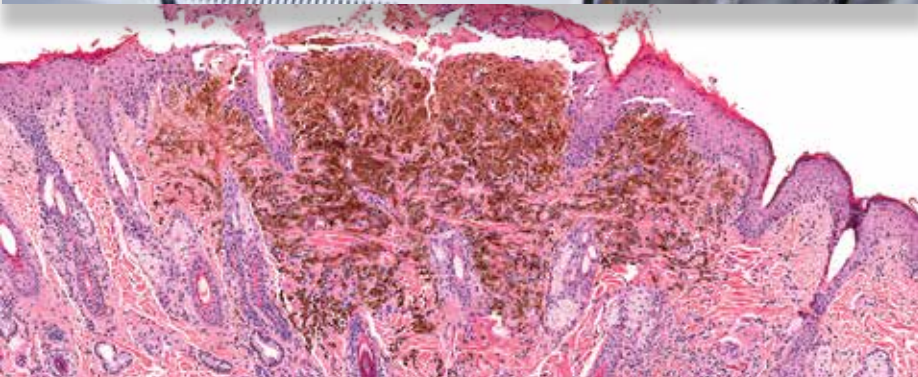


Our new Multidisciplinary Melanoma Clinic at Highland Park Kellogg Cancer Center offers patients the latest technology for early diagnosis and immediate access to a full range of specialists for expert treatment, all in one convenient setting. Experts in medical oncology, dermatology and surgical oncology provide collaborative care at the clinic.

Early diagnosis is critical for the best outcomes in melanoma, which has been on the rise for decades. Advanced technology, including the automated total body mapping system to scan for suspicious pigmented lesions, helps ensure timely diagnosis of skin lesions and tumors. The mapping system allows physicians to easily scan a patient's entire skin for suspicious pigmented lesions and save images for comparison in future examinations. The mole mapping is painless and noninvasive.

For more information or to schedule an appointment, please call (847) 663-8060.

Pictured from left are Dr. David J. Winchester, Dr. Britt Hanson and Dr. Jason Waldinger. Lower photo: Pathology slide from melanoma specimen



Expertise in a Wide Range of Cancers

Breast Oncology

Our focus on prevention and early detection, and our state-of-the-art programmatic and research efforts continue to distinguish NorthShore's comprehensive, multidisciplinary program in breast cancer. NorthShore's collaborative team of specialists is one of the largest academic multispecialty practices in the state of Illinois, and patients with breast cancer make up the largest percentage of Kellogg Cancer Center patients.

Kellogg Cancer Center's high-quality, integrated, patient-centered care is accredited by the American College of Surgeons' National Accreditation Program for Breast Centers (NAPBC), and our fellowship-trained specialists continue to serve in leadership roles.

Our robust and growing clinical research program continues to provide advanced detection and treatment options for our patients.

Among the research projects receiving new and ongoing funding this year are: "Germline Changes in DNA of Women Who Have Developed a Contralateral Breast Cancer"; "Heterogeneity of HER2/neu Positivity in Breast Cancer and Axillary Lymph Nodes"; "Using Genetic Risk Scores to Assess the Efficacy of Mammography Screening among Women Diagnosed with Breast Cancer"; and "Circulating Tumor DNA for Monitoring Breast Cancer."

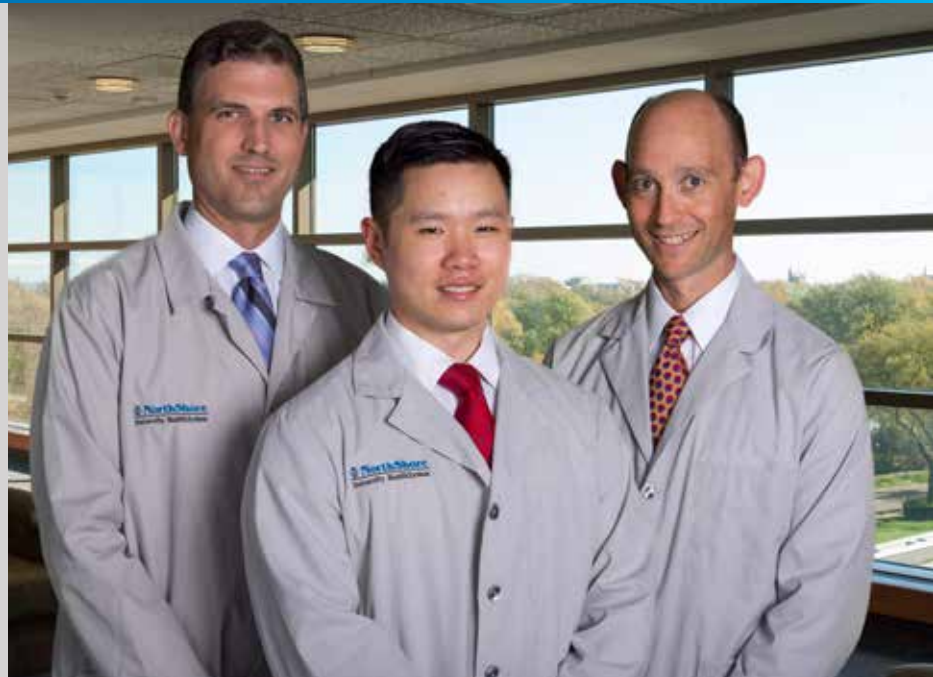
A radioactive seed program for localization of breast tumors prior to surgery enables surgeons to more accurately localize nonpalpable tumors. A new automated breast ultrasound (ABUS) project with Georgia Spear, MD, in diagnostic radiology was recently funded with a grant from GE Healthcare to perform a prospective study on screening breast ultrasound to examine its impact on patient quality of life.

Skull Base Program

A team of fellowship-trained specialists are now working together at NorthShore to provide advanced care for complex skull base tumors. Brain tumors that involve the base of the skull are among the most challenging for surgical access due to the proximity to nerves, blood vessels and the overlying brain. The ear and nasal passages provide a minimally invasive corridor to the skull base.

Because the best skull base oncology care depends on a multidisciplinary team, neurosurgeon Ricky Wong, MD, and otolaryngologists Michael Shinnars, MD, and Joseph Raviv, MD, offer collaborative treatment plans, working together to devise the best strategies for the most complicated cases. These physicians work together in the surgical suite in order to provide the full spectrum of minimally invasive, endoscopic, keyhole and traditional surgical techniques. Each skull base case is thoroughly reviewed by all three experts, using NorthShore's advanced imaging capabilities. Highly individualized surgical approaches are developed jointly. Medical and radiation oncologists are also brought in at monthly conferences to review individual treatment plans. Specialists in plastic surgery, endocrinology and related disciplines are available for team consults and care.

NorthShore's skull base program is among the busiest in the region, and the team operates on tumors previously considered inoperable.



Pictured from left are Dr. Michael Shinnars, Dr. Ricky Wong and Dr. Joseph Raviv.

High-Risk Breast Cancer Program

NorthShore's Breast Cancer Risk Assessment and Prevention Program, launched in 2014 with a generous grant from the North Suburban Health Care Foundation, continues to grow and expand. Breast surgeons Katharine Yao, MD, and Catherine Pesce, MD, coordinate the multidisciplinary program with Barb Guido, APN. The program, which has served more than 2,000 patients since it began, provides a comprehensive breast health evaluation to determine the risk for breast cancer for any woman concerned about her breast health. A personalized breast health care plan, including risk-reduction strategies and counseling on lifestyle modifications, is an important part of the program and empowers women to be proactive for their breast health. The innovative program also coordinates high-risk surveillance, often including breast MRI, for high-risk women. In addition, emerging breast imaging technologies such as automated whole-breast screening ultrasound are offered to women to improve detection of breast cancer based on breast density risk.

The program recently launched a genetic risk score research study to help us better define a woman's risk for breast cancer and the most appropriate time to start screening mammograms. Working to get genetic information into the most clinically friendly format that is transparent and beneficial for patients and physicians is a priority, especially as it relates to helping patients and their physicians make decisions about treatment related to cancer risk.

Prostate/Genitourinary Cancer

The Genitourinary (GU) Oncology Program at the Kellogg Cancer Center is dedicated to providing the latest cutting-edge treatments to patients with advanced GU malignancies. This commitment involves access to innovative clinical research trials. NorthShore's team of experts is led by Daniel Shevrin, MD, who has been involved in delivering innovative treatments to GU cancer patients for more than 25 years. Our dedicated research team includes research nurses, regulatory personnel and pharmacists.

A major focus of our clinical research program is personalized care using individual tumor genomic information to guide therapy. Among the studies that use tumor genetic information to provide personalized care are: "Phase II Study of Niraparib in Advanced Prostate Cancer"; "Phase II Study of Abiraterone + Veliparib in Men with Advanced Prostate Cancer Exhibiting DRD (DNA Damage Repair Defects)"; "Phase II Study of Carboplatin-Based Chemotherapy in Men with Advanced Prostate Cancer Exhibiting DRD Defects."

Another major area of focus is on the use of immunotherapy treatments that enhance the patient's immune system to control their cancer without debilitating side effects, and we have several related studies for advanced prostate cancer.

Other current studies include novel approaches that target the androgen receptor and a trial for advanced prostate cancer targeting bone metastasis. Our new Mindfulness Project uses online teaching of mindfulness techniques to men with advanced prostate cancer to reduce stress and symptoms. These important clinical research efforts are supported by Hikmat and Feryal Yacu and other generous patients.

In collaboration with the Program for Personalized Cancer Care (PPCC), we offer a personalized prostate cancer clinic focused on genomic-based risk assessment to individualize all aspects of care



Dr. Katharine Yao is the Chief of Surgical Oncology.

from screening and prevention to diagnosis and treatment. Our early-stage prostate cancer program continues to grow with an emphasis on risk stratification and active surveillance.

The Division of Urology, led by Michael McGuire, MD, created a clinic for men at high risk for the diagnosis of prostate cancer based on family history or PSA levels. Using the proprietary genetic risk score, we are able to give men an increased understanding of their individual risk of developing prostate cancer. We are also evaluating urine and blood genetic changes to determine the need for further urologic evaluation in patients with hematuria. Tumor and blood banking in all patients with urologic malignancies are being done to advance research and optimize treatment.

Gastrointestinal Oncology

Kellogg Cancer Center's multidisciplinary team offers individually focused treatment developed with collective expertise and the advantage of the latest knowledge and technology to all patients with gastrointestinal cancer. Our collaborative approach ensures outstanding care for rarer or more complicated cases and is facilitated by multidisciplinary clinics at both NorthShore Evanston and Glenbrook Hospitals where patients can see experts from gastroenterology, medical oncology and surgery all in one location. Our Kellogg Cancer Center team includes important support from psychosocial oncology, integrative medicine, specially trained pharmacists, nurses, nutritionists, and others providing comprehensive and seamless care.

Leaders in minimally invasive surgical techniques, NorthShore surgeons perform laparoscopic procedures on most colorectal cancer patients. We are one of only a few centers in the Chicago area using minimally invasive approaches to manage liver resections, including for metastatic colorectal cancer and other diagnoses. Our experienced surgeons continue to push the boundaries of innovative technology, including robotic surgery and scarless, or transanal and transoral procedures.

Interventional Radiology offers a full menu of therapeutic interventions, including embolization of tumor vasculature, radiofrequency ablation and Yttrium-90 perfusion. These techniques are minimally

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invasive and either supplement current multimodality approaches, or replace older, more invasive therapies

The weekly multidisciplinary GI Cancer conferences continue with a separate hepatobiliary (HPB) and colorectal conference. This has resulted in a comprehensive review of most new and complex cases, and in more focused expertise including clinical, radiologic and pathologic at each meeting.

Innovative research is a key component of our GI program. We participate in an array of national and international studies, ensuring that our patients have access to the latest therapies and novel treatment options. Our collaboration with our academic partner the University of Chicago Pritzker School of Medicine significantly strengthens our research efforts and gives our patients even greater access to new, pioneering trials.

Sophisticated technology plays an increasingly critical role in diagnosing and treating benign and malignant tumors in the liver and GI tract. Faris Murad, MD, new Chief of Advanced Therapeutic Endoscopy at NorthShore, is developing a cutting-edge program for treatment of many gastrointestinal cancers. Endoscopic ultrasound is an invaluable tool for early diagnosis and staging of cancers including pancreas, bile duct, esophageal, rectal and others. Dr. Murad is a key member of the

NorthShore team conducting a new study in collaboration with other major cancer centers evaluating stereotactic body radiation therapy in pancreatic cancer, as this requires the accurate placement of “fiducial” markers via endoscopy, prior to therapy.

Colorectal Cancer Program

Our program continues to emphasize prevention and early detection and offers a high-risk colorectal cancer clinic for patients who have a family history or other risk factors. Specialists in medical genetics meet with patients and families and help coordinate personalized screening plans based on individual medical and family history. A special Women’s GI Cancer Risk and Prevention Center directed by Laura K. Bianchi, MD, counsels women about their individual risk and offers personalized risk-reduction strategies including lifestyle modifications. The Center also features enhanced prescreening education with a GI nurse to ease anxiety about colonoscopies.

We have been routinely assessing all colorectal cancer resections for microsatellite instability, which is highly important now as research is showing that patients with metastatic colorectal cancer and high degrees of microsatellite instability may be effectively treated with immunotherapy for long-term benefit or perhaps cure.

Hepatopancreatobiliary Program

Our hepatopancreatobiliary (HPB) program has seen substantial growth in both the clinical and investigational aspects of the program. Accrual to clinical and laboratory studies has resulted in presentation at national meetings and publication of a number of important studies, including two key studies in pancreatic cancer. Both studies address the use of chemotherapy prior to, rather than following, surgery and have already had repercussions both nationally and internationally. Follow-up studies are now available to patients, ensuring that they have the earliest possible access to advanced and evolving therapeutics.

A key aspect of the program continues to be the multidisciplinary clinic, which takes place immediately following the conference. Patients are often seen by medical oncologists, surgeons, hepatologists and gastroenterologists at the same clinic visit and in the same clinic space, assisted by a dedicated nurse navigator. This has also facilitated integration of a personalized medicine approach into treatment planning. Genetic and molecular analysis is frequently a part of the discussion—and if the results are complex, they are presented and reviewed at our dedicated molecular medicine tumor board. Patients may also be referred for counseling in our Department of Medical Genetics.

Gynecologic Oncology

Our Division of Gynecologic Oncology supports a comprehensive clinical and research program aimed at prevention, early detection and treatment of ovarian, uterine and other women’s cancers. Led by Gustavo Rodriguez, MD, the Division brings together a collaborative team that sees patients at all four NorthShore Hospitals. Our multidisciplinary team of specialized experts is dedicated to delivering the most sophisticated and compassionate care to a growing group of patients. Effective management of gynecologic cancers can make the difference between mere survival and a return to good health. The outstanding quality of care provided by the Division has been nationally recognized for scoring in the top percentile for patient satisfaction. Patients benefit from the collaborative care and the

Thrombophilia Clinic

A new clinic headed by Alfonso Tafur, MD, an expert in vascular medicine, is designed to help prevent and treat blood clots in cancer patients. Approximately 20 percent of patients undergoing cancer treatment will develop blood clots, and NorthShore’s clinic addresses this growing need.

Some chemotherapy agents are known to increase the probability of clotting, and Dr. Tafur works with individual patients to consider medication options for prevention. The clinic is currently involved in three separate clinical trials, two aimed at better treatment and one for prevention of blood clots.

With few cancer programs offering this innovative and specialized care, this is another aspect of NorthShore’s commitment to comprehensive care for individual patients. Dr. Tafur sees patients at the Evanston Kellogg Cancer Center.



combined experience of gynecological oncologists, geneticists, radiologists, radiation oncologists, pathologists and critical support services including psychosocial oncology, integrative medicine and nutrition.

An array of important clinical trials ensures that our patients have access to the latest treatment options for women's cancers. The Division's clinical trials program is led by Jean Hurteau, MD, who has served as a principal investigator for translational research projects with the National Cancer Institute-funded Gynecologic Oncology Group (GOG). We leverage the latest technology and innovative techniques with robotic surgery and other minimally invasive procedures through our minimally invasive program (among the most active in gynecologic oncology in the Chicago area) led by Carolyn Kirschner, MD. In addition, she is also developing a survivorship program to enhance the quality of life for our patients. Our palliative care initiatives are being spearheaded by Elena Diaz Moore, MD, in collaboration with the palliative care and hospice teams. With the addition of our newest partner, Mary Tilley Jenkins Vogel, MD, clinical services will be expanded at Glenbrook Hospital.

A major clinical and research focus of the Division is the area of cancer prevention. Dr. Rodriguez and his team have made important discoveries that are opening the door toward the pharmacologic prevention of ovarian and uterine cancer. Building on the significant success of Dr. Rodriguez's research, which is generously supported by Bears Care, the charitable beneficiary of the Chicago Bears, The Auxiliary of NorthShore University HealthSystem, Sandy and Ron Schutz, and other grateful patients, the Clinical Gynecologic Cancer Prevention Program at NorthShore includes risk assessment and evaluation, followed by individualized pharmacologic and surgical strategies for cancer preventive care.

The Division is collaborating with partners at the University of Chicago Pritzker School of Medicine via joint oversight of a prestigious gynecologic oncology fellowship training program awarded by the American College of Obstetricians and Gynecologists.

■ Thoracic Oncology

The multidisciplinary Thoracic Oncology Program (TOP) continues to expand clinical capabilities and pursue both translational and clinical outcomes research, improving care for our patients and contributing to the broader understanding and treatment of thoracic malignancies.

Under the leadership of Neil Freedman, MD, Division Chief for Pulmonary and Critical Care Medicine, a lung cancer screening program has been initiated and new digital health infrastructure designed to coordinate patient care throughout our system has been developed. The TOP program, in collaboration with our colleagues in pathology, uses our advanced molecular diagnostic capabilities, expanding our next-generation sequencing platform to help identify the ever-growing list of potentially treatable molecular alterations. This has greatly improved our ability to provide personalized treatment recommendations for our patients. All new patients are reviewed at our multidisciplinary thoracic oncology tumor board, ensuring the coordination of care and a timely, efficient and complete diagnostic and therapeutic evaluation.

The TOP program continues to develop a robust research program. Our translational program has expanded the clinical trials menu with the ultimate goal of having a clinical trial opportunity for all patients cared for within our program. Novel immunotherapy strategies are a focus, and Thomas Hensing, MD, Co-Director of the TOP program, is leading a multicenter clinical trial investigating the optimal

sequencing of immunotherapy with standard chemotherapy in patients with advanced non-small cell lung cancer. Our clinical research database and biobank has grown and, through a collaborative partnership with the University of Chicago, has been used to support translational research initiatives on immune checkpoints and acquired chemotherapy resistance.

Ki Wan Kim, MD, Co-Director of the TOP program, and Seth Krantz, MD, have developed a clinical outcomes research program using the National Cancer Database (NCDB); Surveillance, Epidemiology, and End Results (SEER) program, and the Society of Thoracic Surgeons General Thoracic Database (STS-GTDB). These activities have led to multiple presentations at national meetings.

■ Neuro-Oncology

The division of Neuro-Oncology, led by Ryan Merrell, MD, treats an expanding patient population, seeing a wide variety of patients including those with primary brain and spine tumors, meningiomas, CNS lymphoma, metastatic tumors and neurologic complications. Our team collaborates closely with medical oncology and sees patients at all three Kellogg Cancer Centers. Our breadth of clinical trials attracts referrals from throughout the region.

Collaboration with Neurosurgery continues to be a key element of our multidisciplinary program. Julian Bailes, MD, serves as our primary neuro-oncological neurosurgeon. Dr. Bailes, Chair of the Department of Neurosurgery, has brought several innovative neurosurgical techniques to our practice, including the NICO system—an endoscopic neurosurgical technique that provides a minimally invasive operating port, which allows the neurosurgeon to surgically remove tumors in difficult locations and avoid harm to normal brain structures. The Synaptive system provides preoperative and intraoperative mapping of important brain structures. Ricky Wong, MD, a specially trained skull base neurosurgeon, has been an important addition to our team. (See page 4 for related article.) Our neuro-oncology program offers the most cutting-edge clinical trials. We currently offer seven trials for gliomas. We recently opened the phase II randomized ICT-107 trial for newly diagnosed glioblastoma. This trial is an immunotherapy study involving a dendritic cell vaccine that targets seven common peptides expressed by glioblastoma. Another recently opened study is a phase II randomized trial of ABT-414 in glioblastoma. NorthShore was one of 10 centers to participate in the phase I version of this trial using personalized medicine. We are the only center in Illinois and the surrounding region to offer phase II randomized Toca 5 trial in recurrent glioblastoma and anaplastic astrocytoma. This involves surgery followed by injection of an engineered retrovirus, which cleaves an oral prodrug into an anti-cancer drug.

We work collaboratively with neuropathology to expand tumor testing that can be performed in-house, and thanks to philanthropic support recently obtained the equipment and validated FISH testing for chromosomal deletions of 1p/19q. Our research initiatives are supported by Michael Matters Foundation and other grateful patients and families.

■ Hematology and Hematologic Malignancies

The Hematologic Malignancy Program at NorthShore offers the latest care for patients with acute and chronic leukemia, myeloma, Hodgkin and non-Hodgkin lymphoma. Led by Lynne Kaminer, MD, the program features four full-time hematologists and three additional physicians whose practice is focused on hematology. The team sees patients at all four NorthShore Hospitals and our Ambulatory Care Center in Gurnee.

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Close collaboration with hematopathologists, and a multidisciplinary conference to review cases, lymph node and bone marrow specimens and treatment plans are key elements of our program. A new multi-colored, channeled flow cytometer allows more precise characterization of immunophenotype of tumors. We have the ability to use an initial sample as a baseline to look for and detect minimal residual disease post therapy, which allows for more precise decisions regarding ongoing maintenance therapy, or to predict early relapse and allow for early intervention. We are also developing specific multi-gene panels with molecular pathology to identify mutations associated with specific malignancies to guide therapeutic decisions.

We analyze molecular features of tumors to enable more precise therapy, and can identify subgroups that are at higher or lower risk or have specific mutations to facilitate therapeutic treatment decisions. Among the new studies that opened this year are several that address specific molecular mutations and a vaccine study for older patients in remission with newly diagnosed acute myeloid leukemia (AML).

Head and Neck Oncology

NorthShore's head and neck cancer (HNC) group is composed of a collaborative team of specialists in otolaryngology/head and neck surgery, radiation oncology and medical oncology, as well as plastic and reconstructive surgery, dental medicine, physical medicine and rehabilitation, psychosocial oncology, nutrition, physical therapy, diagnostic and interventional radiology, pathology, nursing and more.

Our team's focus includes maximizing cancer-related survival, and improving quality of life by minimizing both short-term and long-term side effects of treatment. We provide functional organ preservation using chemoradiation or transoral minimally invasive procedures, as an alternate to traditional open surgery in appropriate cases. In collaboration with head and neck cancer-specific speech and language pathologists, a patient's functional preservation during any treatment is a focus. In addition, our surgeons are among the few performing sentinel lymph node biopsy in early-stage oral cavity carcinomas to reduce the side effects of more invasive procedures.

Our head and neck team welcomes fellowship-trained head and neck and reconstructive surgeon Cheryl Nocon, MD. Dr. Nocon offers specific experience in head and neck oncologic and reconstructive surgery. She joins fellowship-trained head and neck surgical colleague Mihir Bhayani, MD, who has specialized expertise in transoral robotic surgery.

The head and neck surgical team also includes Aaron Friedman, MD, a fellowship-trained laryngologist who specializes in voice-preserving transoral laser surgery of the larynx. In addition, the multidisciplinary skull base program led by Ricky Wong, MD, offers state-of-the-art care for patients with skull base tumors. (See page 4 for related article.)

Clinical and translational research has been a focus of this program, and several new and ongoing projects are under way. Through a generous gift from Marcia W. and L. Bates Lea, we have begun a unique project to examine the risk factors for the development of recurrence, metastasis or death from otherwise generally harmless cutaneous (skin) squamous carcinomas. A large biorepository of these samples is being collected collaboratively between head and neck surgery and dermatology. Ultimately, this will allow us to predict aggressiveness of tumors and make personalized treatment recommendations.

NorthShore continues to participate in novel immunotherapy trials for patients with the most advanced HNC. We recently opened a national clinical trial that aims to assess dramatically decreased doses of

radiation and chemotherapy for HPV-related oropharyngeal cancer patients with a favorable prognosis.

Through the support of the Surgical Outcomes Research Group in the Department of Surgery, numerous projects are under way examining national trends in head and neck cancers. Multiple studies have been presented at national meetings and have resulted in publications. Results will serve as the foundation for studies in treatment disparities to enhance our understanding of the disease and how to optimize patient outcomes.

In August 2016, the FDA approved the first immunotherapy drug for advanced head and neck cancer, which will allow us to use in the clinic what has until now been restricted to clinical trials like ours.

Our physicians and support staff are committed to raising awareness of the currently underreported need for the HPV vaccine for boys and girls—a vaccine that can prevent the development of HPV-related HNC and cervical cancer, though fewer than half of girls in Illinois are being vaccinated.

Melanoma and Other Skin Cancers

Malignant melanoma of the skin has the fastest rising incidence of any cancer in the United States. NorthShore's multidisciplinary melanoma program offers the depth and breadth of experience to use complicated new therapeutics.

Whereas metastatic melanoma was previously one of the deadliest forms of cancer, greater advances have been made in this disease than almost any other form of cancer. In the last five years, NorthShore's melanoma team has had the expertise and support to bring these advances to our patients early and safely.

New molecularly targeted therapies are available for the nearly 50 percent of metastatic melanoma patients whose tumors carry specific mutations in the BRAF gene. Our molecular pathologists are uniquely positioned to test for this mutation, along with multiple less common melanoma gene mutations, within our own lab. This test allows our patients to begin appropriate treatments within days rather than weeks when the test needs to be sent to a referral lab. These therapies have added months or years to patients' lives.

Melanoma has been the cancer most positively impacted by major advances in immunotherapy for cancer. The "checkpoint inhibitor" drugs ipilimumab, pembrolizumab and nivolumab are all now approved for routine use in advanced melanoma and have the capacity to add years to some patients' lives. We had early access to these drugs through clinical trials, providing an advantage for our patients and early expertise for our clinicians.

New studies this year include an important national clinical trial assessing the addition of a third immunotherapy drug to the standard combination regimen. We also participate in a large national registry of treated melanoma patients aimed at answering important questions in real-world practice that cannot be answered in clinical trials.

Additionally, our melanoma program has provided an excellent opportunity in resident medical education and research.

Kellogg Cancer Center patients have access to leading dermatologists. Gregg Menaker, MD, and Ross Levy, MD, are specialty trained experts in Mohs micrographic surgery, a unique technique that allows the sparing of normal tissue in delicate areas such as the face, hands, feet or around the genitals.

Interventional Radiology



NorthShore's Interventional Radiology group includes six specialist physicians, three physician assistants, and more than 40 dedicated nurses and technologists who perform image-guided, minimally invasive cancer therapies aimed at optimizing cancer outcomes, improving quality of life and reducing hospital stay. We offer the latest and most advanced developments in the rapidly evolving and expanding field of interventional oncology.

NorthShore's interventional radiologists work in close collaboration with a team of oncologists, surgeons and radiation oncologists to provide customized care unique to each individual's specific condition. We offer state-of-the-art diagnostic imaging equipment and minimally invasive care. Therapies include Y-90 radio embolization and chemoembolization of both primary and metastatic liver tumors, which provide options when chemotherapy is no longer effective or surgery is not feasible.

We also specialize in radiofrequency, microwave and cryoablation of solid tumors in organs that include the liver, kidneys, bones, lungs and other soft tissues. These are alternative treatments to surgical resection, especially for patients at high risk for surgery.

Pictured from left are Dr. Marc Alonzo, Dr. Hector Farrell and Dr. Thomas Aquisto.

Lower photo: Cross sectional CT scan image of liver tumors

We have initiated a multidisciplinary melanoma clinic combining the "pigmented lesion" expertise of dermatologist Jason Waldinger, MD, with the medical oncology expertise of Britt Hanson, DO, and the surgical oncology expertise of David J. Winchester, MD. (See page 3 for related article.)

In some cases, melanoma may spread or recur within an arm or leg, which can be painful or disfiguring and pose the threat of spreading to other parts of the body. Dr. Winchester is one of only a few physicians in the country who perform complex isolated limb perfusions and isolated limb infusions to treat this challenging condition. This procedure saves patients from amputation and helps control tumors that might otherwise spread.

Radiation Oncology

NorthShore's team of radiation oncologists offers the latest technologies and years of experience for advanced cancer care. The Department of Radiation Medicine is accredited by the American College of Radiology for each of NorthShore's treatment locations at Evanston, Glenbrook and Highland Park Hospitals.

Highland Park Radiation Oncology now has a VitalBeam Linear Accelerator. This state-of-the-art equipment includes the On-Board

Imager, and cone-beam CT localization allowing for a more streamlined treatment delivery. The VitalBeam has the ability to deliver the daily treatment quicker, increasing patients' comfort and allowing for imaging during treatment delivery.

NorthShore was one of the first Chicago-area medical centers to introduce radionuclide therapy for prostate cancer bone metastases using the alpha-emitting radionuclide radium-223. It has been a leader in developing accelerated partial breast irradiation (APBI) for patients with early-stage breast cancer, reducing the time for treatment from six and a half weeks to three weeks.

NorthShore's stereotactic body radiation therapy program continues to grow as an option for patients, offering pinpoint precision to target radiation treatment on tumors or lesions close to critical structures in the body. Stereotactic body radiation enables doctors to treat a range of conditions, including benign and malignant brain tumors; functional brain disorders; and tumors of the head and neck, lung, liver, prostate and spine. This treatment is particularly viable for patients who cannot undergo traditional surgery because of illnesses, for tumors that are located in inoperable areas or for procedures that present increased risk of harming critical structures near the tumor.

Active Clinical Trials

NorthShore patients have access to a broad array of clinical trials and potentially life-saving new treatments. Among our many current trials are:

Brain Tumors

A071101 Phase II randomized trial comparing the efficacy of heat shock protein-peptide complex-96 (HSPPC-96) (NSC #725085, Alliance IND #15380) vaccine given with bevacizumab versus bevacizumab alone in the treatment of surgically resectable recurrent glioblastoma multiforme (GBM)

A221101 Phase III randomized, double-blind, placebo-controlled study of armodafinil (Nuvigil) to reduce cancer-related fatigue in patients with glioblastoma multiforme

Tocagen/Tg 511-15-01 A Phase II/III randomized, open-label study of Toca 511, a retroviral replicating vector, combined with Toca FC versus standard of care in subjects undergoing planned resection for recurrent glioblastoma or anaplastic astrocytoma

ICT 107 STING (Study of Immunotherapy in Newly Diagnosed Glioblastoma): A Phase III randomized, double-blind, controlled study of ICT 107 with maintenance temozolomide (TMZ) in newly diagnosed glioblastoma following resection and concomitant TMZ chemoradiotherapy

A071102 A Phase II/III randomized trial of veliparib or placebo in combination with adjuvant temozolomide in newly diagnosed glioblastoma with MGMT promoter hypermethylation

AbbVie/M13-813 A randomized, placebo-controlled Phase 2b/3 study of ABT-414 with concurrent chemoradiation and adjuvant temozolomide in subjects with newly diagnosed glioblastoma (GBM) with epidermal growth factor receptor (EGFR) amplification (Intelligence 1)

CDX110-05 Expanded access (compassionate use) treatment protocol, rindopepimut (CDX-110)

AbbVie Pre-approval Access Pre-approval access of ABT-414 for treatment of glioblastoma multiforme (GBM)

Breast Cancer

UC13-1-000 Carboplatin, gemcitabine and mifepristone for advanced breast cancer and recurrent or persistent epithelial ovarian cancer

EA221405 Pregnancy outcome and safety of interrupting therapy for women with endocrine responsive breast cancer (POSITIVE)

CBYL719C2301, SOLAR-1 A Phase III randomized, double-blind, placebo-controlled study of alpelisib in combination with fulvestrant for men and postmenopausal women with hormone receptor positive, HER2-negative advanced breast cancer which progressed on or after aromatase inhibitor treatment

EH14-308 A011106 ALTERNATE approaches for clinical stage II or III Estrogen Receptor positive breast cancer NeoAdjuvant TrEatment (ALTERNATE) in postmenopausal women: A Phase III study

AbbVie M12-914 Phase III randomized, placebo-controlled trial of carboplatin and paclitaxel with or without the PARP inhibitor veliparib (ABT-888) in HER2-negative metastatic or locally advanced unresectable BRCA-associated breast cancer

NSABP B-55 Randomized, double-blind, parallel group, placebo-controlled multi-center Phase III study to assess the efficacy and safety of olaparib versus placebo as adjuvant treatment in patients with germline BRCA 1/2 mutations and high-risk HER2 negative primary breast cancer who have completed definitive local treatment and neoadjuvant or adjuvant chemotherapy

EA1131 Randomized Phase III postoperative trial of platinum-based chemotherapy versus observation in patients with residual triple-negative basal-like breast cancer following neoadjuvant chemotherapy

NSABP B-51 A randomized Phase III clinical trial evaluating post-mastectomy chest wall and regional nodal XRT and post-lumpectomy regional nodal XRT in patients with positive axillary nodes before neoadjuvant chemotherapy who convert to pathology negative axillary nodes after neoadjuvant chemotherapy

Gastrointestinal Cancer

UC12-0033 Genotype-guided dosing study of mFOLFIRINOX in previously untreated patients with advanced gastrointestinal malignancies

Astellas 9785-CL-3021 A Phase II randomized, double-blind, placebo-controlled study to assess the efficacy and safety of enzalutamide in subjects with advanced hepatocellular carcinoma

Celgene ABI-007-PANC-003 Phase III, multicenter, open-label, randomized study of nab-paclitaxel plus gemcitabine versus gemcitabine alone as adjuvant therapy in subjects with surgically resected pancreatic adenocarcinoma

Genitourinary Cancer

Astellas ONC-MA-1004 A prospective observational cohort study of patients with castration-resistant prostate cancer (CRPC) in the United States

UC11-0709 Prospective randomized pilot study evaluating the food effect on the pharmacokinetics and pharmacodynamics of abiraterone acetate in men with castrate-resistant prostate cancer

EH09-43 Multiphase study of active surveillance for men with clinical stage T1c or T2a localized prostate cancer

S0931 EVEREST Phase III study of EVerolimus for renal cancer ensuing surgical therapy

EH14-055 S1216 Phase III randomized trial comparing androgen deprivation therapy and TAK-700 with androgen deprivation therapy and bicalutamide in patients with newly diagnosed metastatic hormone-sensitive prostate cancer

A4061070 Metastatic renal cell cancer registry

Bayer 3104007 Multinational, randomized, double-blind, placebo-controlled, Phase III efficacy and safety study of ODM-201 in men with high-risk nonmetastatic castration-resistant prostate cancer

REASSURE Radium-223 alpha emitter agent in noninterventional safety study in metastatic castrate-resistant prostate cancer population for long-term evaluation

Astellas 9785-MA-1008 A multicenter, open-label, single-arm study of enzalutamide re-treatment in the metastatic castrate-resistant prostate cancer, as first treatment post docetaxel in patients who have previously received enzalutamide in the pre-chemotherapy setting

Gynecologic Cancer

G060238 Randomized trial of pelvic irradiation with or without concurrent weekly cisplatin in patients with pelvic-only recurrence of carcinoma of the uterine corpus

NRG-GY005 A randomized Phase II/III study of the combination of cediranib and olaparib compared to cediranib or olaparib alone, or standard of care chemotherapy in women with recurrent platinum-resistant or -refractory ovarian, fallopian tube or primary peritoneal cancer (COCOS)

G06 3005 A Phase III placebo-controlled study of carboplatin/paclitaxel with or without concurrent and continuation maintenance veliparib (PARP inhibitor) in subjects with previously untreated stages of III or IV high-grade serous epithelial ovarian, fallopian tube, or primary peritoneal cancer

G060274 (The Outback Trial) Phase III trial of adjuvant chemotherapy as primary treatment for locally advanced cervical cancer compared to chemoradiation alone

G06277 Phase III randomized trial of gemcitabine (NSC #613327) plus docetaxel (NSC #628503) followed by doxorubicin (NSC #123127) versus observation for uterus-limited, high-grade uterine leiomyosarcoma

G06-0286B Randomized Phase II/III study of paclitaxel/carboplatin/mefenformin (NSC #91485) versus paclitaxel/carboplatin/placebo as initial therapy for measurable stage III or IVA, stage IVB, or recurrent endometrial cancer

UC13-1235 Randomized placebo-controlled Phase II trial of metformin in conjunction with chemotherapy followed by metformin maintenance therapy in advanced-stage ovarian, fallopian tube and primary peritoneal cancer adjuvant treatment

G06 0275 Phase III randomized trial of pulse actinomycin-D versus multi-day methotrexate for the treatment of low-risk gestational trophoblastic neoplasia

G06-0264 Randomized Phase II trial of paclitaxel and carboplatin versus bleomycin, etoposide and cisplatin for newly diagnosed advanced-stage and recurrent chemo-naïve stage sex cord-stromal tumors of the ovary

Pilot Study Pilot study of the impact of early palliative care on quality of life in recurrent ovarian, fallopian tube and primary peritoneal cancer

Head and Neck Cancers

HCN Tissue bank tissue/body fluid procurement and clinical data collection for patients with malignancies of the head and neck area and/or premalignant changes

MK-3475-048-01 A Phase III clinical trial of pembrolizumab (MK-3475) in first-line treatment of recurrent/metastatic head and neck squamous cell carcinoma

NRG-HN002 A randomized Phase II trial for patients with p16 positive, non-smoking associated, locoregionally advanced oropharyngeal cancer

AstraZeneca D419LC00001 A Phase III randomized, open-label, multi-center, global study of MEDI4736 alone or in combination with tremelimumab versus standard of care in the treatment of first-line recurrent or metastatic squamous cell head and neck cancer patients (KESTREL)

RT0G 1216 Randomized Phase II/III trial of surgery and postoperative radiation delivered with concurrent cisplatin versus docetaxel versus docetaxel and cetuximab for high-risk squamous cell cancer of the head and neck

Hematology

UC14-0899 Phase II randomized trial of continuation of post-transplant maintenance with single-agent lenalidomide versus consolidation/maintenance with ixazomib-lenalidomide-dexamethasone in patients with residual myeloma

CALGB 50801 Phase II trial of response-adapted therapy based on positron emission tomography (PET) for bulky stage I and stage II classical Hodgkin lymphoma (HL)

Connect MDS AML The Myelodysplastic Syndromes (MDS) and Acute Myeloid Leukemia (AML) Disease Registry

E1910 Phase III randomized trial of blinatumomab for newly diagnosed BCR-ABL-negative B lineage acute lymphoblastic leukemia in adults

CIBMTR Research database for hematopoietic cell transplantation, other cellular therapies and marrow toxic injuries

Lung Cancer

S1400 Phase II/III biomarker-driven master protocol for second-line therapy of squamous cell lung cancer

Celgene ABI-007-NSCLC-005 Safety and efficacy of nab-paclitaxel (Abraxane®) in combination with carboplatin as first-line treatment in elderly subjects with advanced non-small cell lung cancer (NSCLC): A Phase IV, randomized, open-label, multicenter study

Sarcoma

A091401 Randomized Phase II study of nivolumab with or without ipilimumab in patients with metastatic or unresectable sarcoma

Skin Cancer

E3612 Randomized Phase II trial of ipilimumab with or without bevacizumab in patients with unresectable stage III or stage IV melanoma

S1404 A Phase III randomized trial comparing high dose interferon to MK-2475 (pembrolizumab) in patients with high risk resected melanoma

EA6141 Randomized Phase II/III study of nivolumab plus ipilimumab plus sargramostim versus nivolumab plus ipilimumab in patients with unresectable stage III or stage IV melanoma

BMS CA209-357 A U.S. prospective multi-site observational study in patients with unresectable and metastatic melanoma: The OPTIMIZE study

Other

A221303 Randomized study of early palliative care integrated with standard oncology care versus standard oncology care alone in patients with incurable lung or noncolorectal gastrointestinal malignancies

ACCRU RU221501I A Phase III, randomized, open-label study evaluating the safety of apixaban in subjects with cancer-related venous thromboembolism

Janssen 39039039STM4001 Efficacy and safety of rivaroxaban prophylaxis compared to placebo in ambulatory cancer patients initiating systemic cancer therapy and at high risk for developing venous thromboembolism

DU176b-D-U311 A Phase 3b, prospective, randomized, open-label, blind evaluator (PROBE) study evaluating the efficacy and safety of (LMW) heparin/doxaban versus dalteparin in venous thromboembolism associated with cancer

MATCH Treatment Subprotocol C1 Crizotinib in patients with tumors with MET amplification

MATCH Treatment Subprotocol C2 Crizotinib in patients with tumors with MET exon 14 deletion

MATCH Treatment Subprotocol P Phase II study of PI3K beta specific inhibitor, GSK2636771, in patients with tumors with PTEN loss by IHC

MATCH Treatment Subprotocol X Phase II study of dasatinib in patients with tumors with DDR2 mutations

MATCH Treatment Subprotocol Y AZD5363 in patients with tumors with AKT mutations

MATCH Treatment Subprotocol Z1A Binimetinib in patients with tumors (other than melanoma) with NRAS mutations

MATCH Treatment Subprotocol Z1B Phase II study of palbociclib (PD-0332991) in patients with tumors with CCND1, 2, 3 amplification and Rb protein expression by IHC

MATCH Treatment Subprotocol Z1D Nivolumab in patients with tumors with mismatch repair deficiency (excluding colorectal cancer)

MATCH Treatment Subprotocol T GDC-0449 (vismodegib) in patients with tumors (except basal cell skin carcinoma) with smoothened (SMO) or patched 1 (PTCH1) mutations

MATCH Treatment Subprotocol N Phase II study of PI3K beta specific inhibitor, GSK2636771, in patients with tumors with PTEN mutation or deletion, with PTEN expression on IHC

MATCH Treatment Subprotocol S2 Phase II study of trametinib in patients with tumors with GNAQ or GNA11 mutations

MATCH Treatment Subprotocol I GDC-0032 (taselisib) in patients with tumors (other than breast cancer) with PIK3CA mutation but without KRAS mutation or PTEN losses

MATCH Treatment Subprotocol W Phase II study of AZD4547 in patients with tumors with aberrations in the FGFR pathway

MATCH Treatment Subprotocol S1 Phase II study of trametinib in patients with tumors with NF1 mutations

NCI 9671 Exceptional responders pilot study: Molecular profiling of tumors from cancer patients who are exceptional responders

EAY131 Molecular Analysis for Therapy Choice (MATCH)

EAY131-R Phase II study of trametinib in patients with BRAF fusions, or with non-V600E, non-V600K BRAF mutations

EAY131-G Phase II study of crizotinib in patients with ROS1 translocations (other than patients with non-small cell lung cancer)

EAY131-B Phase II study of afatinib in patients with HER2 activating mutations

EAY131-E AZD9291 in patients with tumors having EGFR T790M mutations (except non-small cell lung cancer) or rare activating mutations of EGFR

EAY131-F Crizotinib in patients with tumors (other than adenocarcinoma of lung or ALCL) with ALK rearrangements

EAY131-U VS-6063 Defactinib in patients with tumors with NF2 loss

EAY131-Q Ado-trastuzumab emtansine in patients with tumors with HER2 amplification (except breast and gastro/gastro-esophageal junction [GEJ] adenocarcinomas)

EAY131-H Phase II study of dabrafenib and trametinib in patients with tumors with BRAF V600E or V600K mutations (excluding melanoma and thyroid cancer)

EAY131-V Phase II study of sunitinib in patients with tumors with c-kit mutations (excluding GIST, renal cell carcinoma or pancreatic neuroendocrine tumor)

Breast Surgery

EH15-297A Randomized Phase III trial comparing axillary lymph node dissection to axillary radiation in breast cancer patients (cT1-3 N1) who have positive sentinel lymph node disease after neoadjuvant chemotherapy—Alliance A011202

EH15-308 Using genetic risk scores to assess the efficacy of mammography screening among women diagnosed with breast cancer

EH15-385 Clinical benefit of breast MRI for newly diagnosed invasive and noninvasive breast cancer

EH16-063 Germline genetic profiles associated with contralateral breast cancer patients

EH11-277 Continuation of retrospective analysis of breast MRI performed at NorthShore University HealthSystem for newly diagnosed breast cancer

EH14-346 Effects of preoperative breast MRI on surgical outcomes, costs and quality of life of women with breast cancer—Alliance A 011104/ACRIN 6694

EH15-142 Regional variation of breast surgery in SEER—Medicare

EH15-210 Continuation of the accelerated partial breast irradiation experience in early stage breast cancer at NorthShore

EH15-296 Surveillance, epidemiology, and end results (SEER)—breast

EH14-020 Piloting and in-visit decision aid for contralateral prophylactic mastectomy decision making

EH09-387 Retrospective analysis of breast MRI performed at NorthShore University HealthSystem for newly diagnosed breast cancer

EH88-077 The establishment and maintenance of the NorthShore University HealthSystem comprehensive data registry for breast surgeries and breast tissue bank

EH07-099 Mentor post-approval study of mentor MemoryGel breast implants in women undergoing breast augmentation or reconstruction

EH11-124 Development and maintenance of a comprehensive breast reconstruction registry at NorthShore University HealthSystem

EH12-321 An investigation of disparities in the delivery of breast reconstruction among older patients who undergo mastectomy

EH14-045 A retrospective review of pain control using exparel versus bupivacaine pain pump in implant-based breast reconstruction

EH14-218 Does contralateral prophylactic mastectomy improve satisfaction and psychosocial health?

EH16-050 Unilateral versus bilateral mastectomy and reconstruction: A 5- and 10-year cost analysis

Colorectal Surgery

EH12-468 N1048 A Phase II/III trial of neoadjuvant FOLFOX with selective use of combined modality chemoradiation versus preoperative combined modality chemoradiation for locally advanced rectal cancer patients undergoing low anterior resection with total mesorectal excision

EH13-089 Investigating gene profiles of colorectal hepatic metastases

Head and Neck Surgery

EH16-296 Evaluation of feeding tube placement and dysphagia in head and neck cancer patients

Pancreatic Cancer

EH12-060 Genomics of pancreatic cancer

EH12-118 Retrospective analysis of clinical and pathological features in patients with ampullary carcinoma

EH14-399 Survival differentiators in pancreatic cancer

EH08-1977 Clinical pancreatic cancer database

EH13-296 Retrospective analysis of association of sarcopenia with frailty and surgical outcomes in patients with pancreatic pathology

EH13-362 Outcomes of pancreatic cancer

Lung and Esophageal Cancer

EH98-136 Establishment and maintenance of a comprehensive thoracic tumor data registry and biorepository

EH13-155 Best practice in VATS lobectomy for lung cancer: Database management and analytics for a longitudinal study to optimize care for lung cancer patients

EH15-121 A Phase III double-blind trial for surgically resected early stage non-small cell lung cancer: Crizotinib versus placebo for patients with tumors harboring the anaplastic lymphoma kinase (ALK) fusion protein (E4512)

EH15-122 Randomized double-blind, placebo-controlled study of erlotinib or placebo in patients with completely resected epidermal growth factor receptor (EGFR) mutant non-small cell lung cancer (NSCLC), A081105

EH15-175 A multicenter, randomized trial of esophagectomy and cervical esophagogastrostomy with (two-stage) or without (one-stage) prior ischemic gastric preconditioning by laparoscopic ligation of left gastric and short gastric arteries

EH15-333 Chart review study to measure the incidence of delayed gastric emptying syndrome (DGES) in esophagectomy patients and report their outcomes

EH15-205 A Prospective, multi-center evaluation of a powered vascular stapler in video-assisted thoracoscopic lobectomies—Protocol #: ESC-15-001

16-268 EA5142 Adjuvant nivolumab in resected lung Cancers (ANVIL): A randomized Phase III study of nivolumab after surgical resection and adjuvant chemotherapy in non-small cell lung cancers

EH16-325 Intercoastal liposomal bupivacaine injection efficacy compared to continuous subpleural bupivacaine infusion—a follow-up study of EH13-303

Thyroid Surgery

EH12-310 The occurrence of BRAF mutation in thyroid cancer

EH14-058 The establishment of a multi-disciplinary comprehensive database of patients for thyroid nodular disease

EH14-263 Epigenetic chromatin conformation changes in peripheral blood to differentiate benign versus malignant thyroid lesions

Genitourinary Cancer

EH09-043 A multi-phase study of active surveillance for men with clinical stage T1c or T2a localized prostate cancer

EH10-089 Periprostatic fat as a promoter of prostate cancer progression

EH10-379 3-dimensional transrectal ultrasound for prostate cancer diagnosis and surveillance

EH13-049 Compliance and outcomes with penile rehabilitation in men after prostate cancer treatment

EH13-088 Mind-body health in uro-oncology

EH13-250 Cancer susceptibility: The ICPG study (International Consortium for Prostate Cancer Genetics)

EH13-434 Transforming diagnosis of aggressive prostate cancer via nanocytology of field carcinogenesis

EH13-446 A retrospective review of patients who have been removed from study EH09-043: A multi-phase study of active surveillance for men with clinical stage T1c or T2a localized prostate cancer

EH14-133 The Lived Experience of Men with Sexual Dysfunction after Prostate Cancer Treatment

EH14-031 Genomic markers in transitional cell cancer of the bladder, renal pelvis and ureter: Sample acquisition for methods development and discovery

EH14-285 Fat and its relationship to prostate, bladder and kidney cancer

EH15-240 Urologic oncology: Costs and complications

EH14-206 Nanocytology to mitigate overdiagnosis of prostate cancer

EH15-241 Achieving comparable diagnostic accuracy of prostate cancer (PCa) using fine-needle aspiration (FNA) nanocytologic diagnosis based on detection of field carcinogenesis by partial wave spectroscopy (PWS)

EH16-009 Clinical validation of a urine-based assay with genomic and epigenomic markers for predicting recurrence during non-muscle invasive bladder cancer surveillance

EH16-183 Evaluation of the utility of the prostate health index in routine clinical practice

EH16-202 Detecting copy number alterations (CNAs) of MYC and PTEN in biopsy samples to predict clinical outcomes in prostate cancer

EH16-232 Trends in upper tract urothelial treatment

EH16-240 Timing of artificial urinary sphincter placement

EH15-124 Reducing the Effects of Active Surveillance Stress, Uncertainty and Rumination thru Engagement in Mindfulness Education (REASSURE ME)

EH15-403 Mindfulness online for symptom alleviation and improvement in cancer of the prostate (MOSAIC-P)

EH16-236 Novel genetic markers for predicting clinical outcomes in patients with high-grade superficial bladder cancer

EH16-239 The impact of using genetic risk scores (GRSs) for inherited risk assessment of prostate cancer

Comprehensive Support Through All Phases of Cancer Care

■ Nutrition and Dietary Guidance

Nutrition counseling is an important aspect of care for our patients. Proper nutrition is critical to good health, yet maintaining a healthy diet can be especially challenging for individuals undergoing cancer treatment. Registered dietitian-nutritionists (RDNs) with expertise in oncology are available to provide medical nutrition therapy (MNT) for patients to develop nutrition goals, help devise meal plans throughout therapy and educate patients regarding nutrition related to outcomes and survivorship. This support can be vital in helping maintain nutritional reserves during and after cancer treatments.

MNT has been found to improve patient outcomes and quality of life before, during and after treatments and/or surgery and can provide numerous benefits including: managing symptoms such as nausea, taste changes and bowel changes; preventing or correcting nutritional deficiencies resulting from the cancer or its treatment; improving the ability to tolerate treatment and recover when treatment ends; helping achieve and maintain a healthy weight; and maintaining functional capacity. MNT guides patients in translating evidence-based cancer nutrition research related to prevention and reducing risk of recurrence.

■ Psychosocial Support

Kellogg Cancer Center's Psychosocial Oncology Program offers services to patients and their families to help them manage their emotional and practical needs during treatment. The team sees patients who are new to chemotherapy infusions, those referred directly for specific needs, and those who have identified themselves as distressed on the Psychosocial Distress Screening Tool as well as ongoing supportive check-ins throughout treatment as possible.

A team of experienced oncology social workers help patients and their families understand and process the wide range of normal emotional reactions they have to diagnosis, treatment and, for some, terminal illness. The team helps identify and address barriers to receiving treatment, including transportation and financial concerns, and also builds a comprehensive network of support by providing referrals as needed to local cancer support programs, integrative medicine and mental health clinicians in the community. Our social workers also assist with advanced care planning, including living wills and durable power of attorney for health care forms.

The psychosocial program works with the patient's medical team, the ambulatory care management team and inpatient social work team to provide continuity of care for patients. Our team, along with nursing, recently initiated a popular coloring stress reduction and distraction project offered during treatments, made possible by a generous donor.

The program also facilitates a biweekly in-house stress reduction group as well as other monthly support groups for those with brain tumors, head and neck cancer, prostate cancer and breast cancer. Team members help facilitate grants applications to help Kellogg Cancer Center's most economically vulnerable patients meet basic living needs and enhance quality of life.

Philanthropic gifts from our patients and their families play a vital role in our Psychosocial Oncology Program.

■ Integrative Medicine

The Integrative Medicine Program at NorthShore University HealthSystem, under the leadership of Leslie Mendoza Temple, MD, provides its services to many Kellogg Cancer Center patients. Since 2009, hundreds of patients have been positively impacted by services such as acupuncture, bodywork, counseling and physician consultations. In some cases, these are provided at no cost to qualified individuals due to the generous support of donors and various benefits.

With the increase of patients seeking complementary therapies, NorthShore has seen tremendous growth in the number of integrative medicine fellowship-trained physicians over the past 10 years, including Dr. Mendoza Temple (Family Medicine); Geeta Maker-Clark, MD (Family Medicine); Mina Ryu, MD (Internal Medicine); Pooja Saigal, MD (Family Medicine) and Smita Patel, MD (Neurology). Rebecca Weiss-Coleman, MD (Family Medicine); Deeba Masood, MD (Allergy and Immunology) and Tama Porter, MD (Endocrinology) are currently in fellowship training at the Arizona Center for Integrative Medicine.

Dr. Weiss-Coleman from the Lincolnwood Family Medicine clinic was recruited in August 2016 as a new Integrative Family Medicine clinical fellow.

The Integrative Medicine Program has a truly unique team approach of physicians, acupuncturists, massage therapists, a psychotherapist and nutritionists who collaborate and work closely with other NorthShore clinicians to help improve the lives of our patients and their families.

■ LIFE Cancer Survivorship

At NorthShore we pride ourselves on offering comprehensive and exemplary care for patients throughout their journey through the cancer care continuum and beyond. The mission of the Living in the Future (LIFE) Cancer Survivorship Program is to provide patient, family and health professional venues and transition strategies that bridge the gap between the oncology treatment environment and the primary care setting. For more than 10 years, the LIFE program, under the direction of its founder Carol A. Rosenberg, MD, FACP, has woven together individualized healthcare, self-management tools and clinical support after treatment completion. The LIFE program pioneered survivorship care planning at NorthShore, and is continuing to lead the evolution of survivorship care and assist with the implementation of a new integrative technology survivorship care planning initiative to facilitate addressing all survivors in a more comprehensive way. The LIFE model of survivorship care was recently described in the international *Journal of Cancer Survivorship* and has achieved an international reputation for helping survivors construct a useful understanding of their cancer experience and promote productive long-term self-management.

The LIFE program's educational reach goes beyond the immediate NorthShore patient. In LIFE's Myra Rubenstein Weis (MRW) Survivor 101 Seminars, for example, survivors and their families are taught the science of improving the quality and quantity of their life after treatment. This seminar series is available to anyone in the community.

The LIFE program trains emerging internists and family medicine practitioners, as well as nurses, clinical researchers and mental health professionals, to address the issues that arise among cancer survivors. This curriculum was created and directed by Dr. Rosenberg and accredited by the University of Chicago Pritzker School of Medicine, is one of the first of its kind in the nation to provide the formal integration

of a cancer survivorship course into the core learning experiences for physicians in training and health.

LIFE has benefited from the ongoing philanthropic support in memory of Myra Rubenstein Weis and other generous supporters.

Financial Advocacy

Patient Financial Advocates assist and are available to meet with new patients as they start chemotherapy treatments. We recognize that the financial burdens associated with cancer treatment often add to the stress of a diagnosis and care plan, and we have a well-established assistance program designed to help with a variety of financial issues.

Our specially trained advocates work with a team of precertification specialists who work to have treatment plans preauthorized for payment and can answer questions about bills and charges. They may also assist in the precertification of some diagnostic tests.

For patients who demonstrate significant financial need, our advocates coordinate reduced-cost care through state programs, NorthShore's charity care program, and in some cases working directly with pharmaceutical companies or other private foundations.

We have had significant success in helping patients acquire often extremely expensive oral cancer treatment medications, saving our patients millions of dollars of out-of-pocket costs over the past several years. Our Patient Financial Advocates work closely with social workers and the entire Kellogg Cancer Center team.

Dedicated Oncology Pharmacy

Nationally certified and specially trained oncology pharmacists staff a dedicated oncology pharmacy in each Kellogg Cancer Center. The pharmacy team works closely with physicians and nurses and understands the specific needs of cancer patients, as well as potential side effects or interactions of medications, and is committed to providing excellent treatment. Given the dramatic increase in the number of available oral anticancer (OAA) agents, our oral chemotherapy pharmacy is an important resource for patients. Our pharmacists help with education recommendations regarding changes in medications and monitoring and managing side effects and other symptoms. NorthShore has initiated several OAA quality improvement projects, including most recently the development of a drug-specific electronic patient assessment tool that was integrated into the Electronic Medical Record (EMR) system through our patient portal, NorthShoreConnect.

The oncology pharmacy plays a key role in many quality improvement projects and clinical trial management at NorthShore, and has been a national leader in computerized physician chemotherapy ordering, and patient quality and safety.

Patient Education

We are dedicated to providing holistic and compassionate care to patients and their families, and our resource centers reflect our desire to provide as much educational support as possible for all stages of the cancer journey.

Philanthropic support has been essential in developing the Myra Rubenstein Weis (MRW) Health Resource Center at NorthShore Highland Park Hospital, and the Kellogg Cancer Resource Center at Evanston Hospital, established in memory of patient Ira Korman. Both centers offer valuable information vehicles and opportunities for patient education. Computer stations include carefully curated links to appropriate websites, and specially selected books, periodicals and DVDs are available for checkout to patients and families.

Collaborative nurses meet with new patients to review individual treatment plans and develop a relationship that encourages them to ask questions throughout their care. Comprehensive patient education materials are also provided for all patients.



Dr. Leslie Mendoza Temple leads NorthShore's Integrative Medicine Program

NorthShore's "Understanding Cancer" educational programs are one element of our community outreach and education efforts. Held several times throughout the year, these physician-led programs provide the community with cancer-related information from cutting-edge diagnostic options to minimally invasive surgical techniques, modern treatment options and genetic factors. Following the presentations, participants have the opportunity to ask questions and obtain answers from a panel of Kellogg Cancer Center physicians.

Advance Care Planning

Helping patients articulate and document their end-of-life views can ensure peace of mind and preserve their dignity and comfort during an otherwise stressful and challenging time for families.

Kellogg Cancer Center's Advance Care Planning (ACP) initiative was designed to improve quality of life for advanced care patients while ensuring that they receive their preferred level of care and in the setting they desire.

The ACP initiative—run by Palliative Care Director Michael Marschke, MD, and oncologist Nicholas Campbell, MD—has trained many physicians, nurses and social workers about how to comfortably discuss ACP and end-of-life issues with patients. New patients at Kellogg Cancer Center are introduced to ACP with questions about their short- and long-term goals. Then, in a follow-up education session, patients are given an ACP guidebook to help as they contemplate various medical scenarios. When necessary or requested, social work services are provided for families needing additional assistance with these decisions.

Internal medicine residents are also educated through an innovative curriculum created in partnership with the University of Chicago Pritzker School of Medicine designed to improve their proficiency in ACP outpatient discussions. The curriculum includes four components—an online module, a lecture by a physician with ACP expertise, a video-recorded ACP discussion with a patient and a supervised outpatient encounter with a patient. Residents' response to the curriculum has been overwhelmingly positive in providing a much-needed hands-on experience.

Academic Leadership Roles and Awards 2015–2016

Kellogg Cancer Center physicians are active in a broad range of regional and national organizations.

Charles Brendler, MD

- Journal Referee: *Journal of Urology*, *Urology*, *Journal of Clinical Oncology*

Bruce Brockstein, MD

- Member, Head and Neck Committee, Eastern Cooperative Oncology Group, 2000-present
- *UpToDate* (Online Textbook), Chapter Editor, Head and Neck Cancer, 2000-present
- *Chicago Magazine* Top Doctors, 2006, 2008, 2010, 2012, 2014, 2016
- Grant Reviewer, Cancer Research UK
- CCGT, Belgian Foundation Against Cancer
- Manuscript reviewer, Head and Neck; *Annals of Surgical Oncology*

Elena Diaz, MD

- Journal Ad Hoc Peer Reviewer, *Gynecologic Oncology*, 2014-present
- 2016 Innovations Grant: \$10,000, NorthShore University HealthSystem, Department of Obstetrics and Gynecology

David Grinblatt, MD

- Member, Alliance for Clinical Trials in Oncology, Community Oncology Committee
- Scientific Advisory Committee, CONNECT CLL Registry
- Scientific Advisory Committee, MDS/AML Patient Registry

Thomas Hensing, MD

- Lung Cancer Initiative Advisory Council, Respiratory Health Association
- Member, Alliance Respiratory Committee
- Scientific Committee Member, ASCO Thoracic Oncology Tract
- Chair, Lung Oncology Group in Chicago (LOGIC)
- Respiratory Health Association, Lung Cancer Initiative Advisory Council
- Commission on Cancer (CoC)/National Cancer Database (NCDB) Lung Quality Measures Group

Invited Lectures:

- Presentation to Fellows: "ASCO 2016 Meeting Highlights, Lung Cancer." ASCO Annual Meeting, Chicago, IL, June 2016

Michael Howard, MD

- Manuscript Reviewer, *Journal of Surgical Oncology*, 2013-present
- Manuscript Reviewer, *Plastic & Reconstructive Surgery, Breast Section*, 2007-present
- LEAP Foundation, Medical Mission Volunteer, Instructor, Surgical Disaster Response Team, 2009-present
- Bright Pink, Founding Member, Board of Directors, Expert Panel Member, 2007-present

Jean Hurteau, MD

- Member of the Development Therapeutics Committee of NRG/Gynecologic Oncology Group, 2012-present
- Member of the Rare Tumor Committee of NRG/Gynecologic Oncology Group, 2012-present
- Member of the International Committee of the Society of Gynecologic Oncology, 2013-present

Karen Kaul, MD

- American Board of Pathology, Appointed Trustee, 2011-present
- American Board of Pathology, ACGME Residency Program Review Committee, 2012-present; ACGME Molecular Genetics Pathology Fellowship Milestones Committee, 2013-2014; Secretary, Executive Committee, 2015-present
- American Board of Medical Specialties, Member, Physician-Scientists and Continuing Certification Committee, 2014-present
- American Society of Clinical Pathology, Member, Ad Hoc Working Group on GME, 2012-present
- Association for Molecular Pathology, 2010-present; Member, Joint Journal Oversight Committee, 2010-2015, Awards Committee, 2014-2015
- College of American Pathologists, Laboratory Test Utilization Group, 2013-present; Member, Executive Advisory Board, *Archives of Pathology & Laboratory Medicine*, 2015-present
- PRODS (Pathology Residency Program Directors), Member PRODS Council, 2009-present; Council of Medical Specialty Societies/OPDA representative, 2009-present; Training Residents in Genomics (TRIG) Joint Committee, 2010-present
- Association of Pathology Chairs, Member, 2012-present; Chair (elected), GME Committee, 2015-2018; Council, 2015-present
- Tapestry/SPOT Dx Panel Member, 2014-2015
- Ad Hoc Member, NIH/NCI PO1 reviewer, 2001-present
- SBIR Review Panels, various (Panel Chairperson, 2010-present), 2008-present
- Peer Reviewer, Prostate Cancer Foundation, 2010-present
- Peer Reviewer, University of Chicago CTSA Pilot Program, 2011-present
- Chair, NorthShore Auxiliary Breast/Ovarian Research Program, 2013-present

Editorial:

- Editorial Board, *Annual Reviews in Pathology*, 2001-present
- Associate Editor, *Academic Pathology*, 2014-present
- Ad Hoc Reviewer: *Cell Growth and Differentiation*, *Pediatric Pathology*, *Cancer*, *Clinical Microbiology Reviews*, *Tubercle*, *Chest*, *Archives of Pathology and Laboratory Medicine*, *Clinical Chemistry*, *American Journal of Clinical Pathology*, 1990-present

Janardan Khandekar, MD

- Associate Editor, *Journal of Surgical Oncology*
- Reviewer for *Cancer*, *Journal of Clinical Oncology*, *Journal of Surgical Oncology*, *Journal of National Cancer Institute*
- Chairman, Awards Committee, American College of Physicians (Illinois), 2012-present
- Presenter at American Society of Clinical Oncology (ASCO) Annual Meeting, Chicago, IL, May 2016

Carolyn Kirschner, MD

- Membership Committee, Society of Gynecologic Oncologists, 2011-present
- Patient Advocacy Reporting System, 2011-present

Robert Marsh, MD

- Member, GI Committee, Eastern Cooperative Oncology Group
- Editorial work: *Southern Medical Journal*, *Cancer*, *Rogers Medical Intelligence Solutions CME Programs*, *American Journal of Clinical Oncology*, *Journal of the Pancreas*, *Lancet Oncology*, *European Journal of Surgical Oncology*, *Public Library of Science*

Leslie Mendoza, MD

- Outgoing Chair, Medical Cannabis Advisory Board, Illinois Department of Public Health (mcpp.illinois.gov)
- Policy Working Group Chair for the Academic Consortium for Integrative Medicine and Health (imconsortium.org)

Gustavo Rodriguez, MD

- Medical Advisory Board, Chicago Ovarian Cancer Alliance, 2003-present
- Advisory Board, Gilda's Club, Chicago, 2004-present
- Member, Cancer Prevention and Control Committee, Gynecologic Oncology Group, 1997-present
- Recipient, Myra Rubenstein Weis Award for Clinical Excellence and Humanitarianism, 2015

Carol Rosenberg, MD

- Research Investigator, Women's Health Initiative study, National Institutes of Health (NIH), 1999-present
- Director, Cancer Survivorship Educational Curriculum for Emerging Healthcare Professionals, NorthShore University HealthSystem Internal Medicine and Family Medicine Post Graduate Training Program
- Director Cancer Survivorship CME Curriculum for Healthcare Professionals, NorthShore University HealthSystem; University of Chicago Pritzker School of Medicine CME Accredited
- Coleman Foundation Citywide Supportive Oncology Initiative (CSOI) Survivorship Design Member/Consultant, 2015, 2016
- Patient-Centered Outcomes Research Initiative (PCORI) National Comparative Effectiveness Evaluation of Survivorship Programs in the United States, LIFE site Project Supervisor, LIFE Program Participant Program, 2015–2016

Carol Rosenberg, MD (continued)

- Scholars in Oncology-Associated Research (SOAR) Program at the University of Chicago Pritzker School of Medicine; Survivorship Curriculum. Faculty Instructor, Invited Lecturer
- American College of Physicians (ACP) Survivorship Steering Committee representative, faculty-invited lecturer for the 2016 Inaugural Cancer Survivorship Symposium, ASCO-ACP-AAFP Advancing Care and Research—A Primary Care and Oncology Collaboration. San Francisco, CA, January 15-16, 2016
- Honoree, Myra Rubenstein Weis Health Resource Center Foundation NorthShore University HealthSystem for Innovations in Cancer Survivorship Care and Education, May 4, 2016

Invited Speaker:

- 2016 Inaugural Cancer Survivorship Symposium, ASCO-ACP-AAFP Advancing Care and Research—A Primary Care and Oncology Collaboration. Faculty Presenter: Post-Graduate Medical Training: Educating Emerging Healthcare Professionals to Care for Survivors. San Francisco, CA, January 16, 2016
- Scholars in Oncology-Associated Research (SOAR) Program at the University of Chicago Pritzker School of Medicine; Survivorship Medical Student Curriculum, Faculty Invited Lecturer: What Is Cancer Survivorship? Cancer Survivors Living in the Future. University of Chicago Pritzker School of Medicine, Chicago, IL, July 27, 2016

Prem Seth, PhD

- Editorial Board, *Cancer Gene Therapy*
- Editorial Board, *Molecular Therapy—Oncolytics*
- Member, FDA site visit team, May 2016

Daniel Shevrin, MD

- Member, ECOG GU Committee
- Community Co-Chair, ECOG GU Committee
- Member, Executive Committee, Prostate SPORE, Northwestern University
- Director, Advocacy Core, Prostate SPORE, Northwestern University
- Member, NCI GU Steering Committee

Mark Sisco, MD, FACS

- Division Head of Plastic Surgery (as of September 1, 2015)
- Appointed to the Editorial board of the *Journal of Surgical Oncology*, 2015

Editorial:

- Editorial board, *Journal of Surgical Oncology*
- Peer Reviewer: *Journal of Surgical Research*, 2010-present; *Journal of Surgical Oncology*, 2014-present
- Patent: Mustoe TA, Dean NM, Sisco M, Kryger Z, Bennett FC. "Method for Reducing Scarring During Wound Healing Using Antisense Compounds Directed to CTGF." U.S. Patent 8,946,172, issued February 3, 2015.

Mark Talamonti, MD

- Society of Surgical Oncology, Committee on Corporate Relations, 2010-2015
- Chicago Surgical Society, President, 2015-2016

Mark Talamonti, MD (continued)

- Society of Surgical Oncology, Foundation Board of Directors, 2014-2017
- Executive Council, Pancreas Club, 2007-present
- Western Surgical Association, Membership Committee, 2012-present; Treasurer, 2012-present
- Chairman, Department of Surgery, NorthShore University HealthSystem, 2007-present

Editorial:

- Editorial Board, *Annals of Surgical Oncology*, *Journal of Surgical Oncology*; Section Editor, *Hepatobiliary and Pancreas*
- Invited Reviewer, *American Journal of Surgery*, *Annals of Surgery*, *Archives of Surgery*, *Cancer*, *Journal of the American College of Surgeons*, *Journal of Clinical Oncology*, *Oncology*, *Surgery*, *World Journal of Surgery*

Presentations:

- "Current Management and Future Treatment Strategies for Pancreatic Cancer." AGA Course for Nurse Practitioners and Physician Assistants. Chicago, IL, August 16, 2015. Presenter and Panel Discussant.
- "Defining Quality and Improving Patient Outcomes for Patients Undergoing Surgery for Pancreas Cancer." RUSH University Medical School, Chicago, IL, January 17, 2016. Visiting Professor
- "Overall Survival Is Increased Among Stage III Pancreatic Adenocarcinoma Patients Receiving Neoadjuvant Chemotherapy Compared to Surgery First and Adjuvant Chemotherapy: An Intention to Treat Analysis of the National Cancer Database." Central Surgical Annual Meeting. Montreal, Canada. March 12, 2016. Invited Discussant.
- "Investing in a Minimally Invasive Pancreatic Resection Program: The Chairman's Perspective." Symposium on Minimally Invasive Pancreatic Surgery at the International Hepato-Pancreato-Biliary Meeting. São Paulo, Brazil. April 20, 2016. Presenter and Panel Discussant.
- "Great Problems of Our Time: Pancreatic Cancer." International Hepato-Pancreato-Biliary Meeting. São Paulo, Brazil. April 21, 2016. Presenter and Panel Discussant.

Elaine Wade, MD

- President, North Shore Regional Division, American Cancer Society, 2007-present

James Ward, MD

- Lead Physician, Breast Cancer Research, NorthShore University HealthSystem, 2015-present
- Ad Hoc Reviewer: *Endocrine-Related Cancer*, *New England Journal of Medicine*, *The Breast Journal*, *British Journal of Cancer*
- NorthShore University HealthSystem, Pilot Research Grant Program, "Circulating Tumor DNA for Monitoring Breast Cancer," Role: Principal Investigator, 2016

David J. Winchester, MD

- Director, Rice Foundation, 1998-present
- American Joint Committee on Cancer (AJCC), Vice-Chairman, 2011-present; Finance Committee, 2008-present; Education and Promotions Committee, 2007-present
- Member of Editorial Board, *Breast Diseases: A Year Book Quarterly*, 1998-present

David J. Winchester, MD (continued)

- Metropolitan Chicago District #2 Committee on Applicants, American College of Surgeons, 1999-present
- Program Committee, Society of Surgical Oncology, 2009-present
- American College of Surgeons, Commission on Cancer, 2007-present
- Member of Alliance ACS Clinical Research Program, 2012-present

Editorial:

- Member of Editorial Board, *American Journal of Clinical Oncology*, 2006-present; Associate Editor, 2009-present
- Member of Editorial Advisory Board, *American Family Physician*, 2012-present
- Section Editor, *Journal of Surgical Oncology*, 2014-present
- Ad Hoc Reviewer: *Annals of Surgical Oncology*, *British Journal of Cancer*, *Cancer*, *Canadian Medical Association Journal*, *Clinical Breast Cancer*, *Cancer Control: Journal Moffitt Cancer Center*, *Journal of Clinical Oncology*, *The Lancet Oncology*, *World Journal of Surgical Oncology*

Awards/Honors:

- *Chicago Magazine* Top Doctor, 2014, 2016
- Karen Dove Cabral Foundation, Guiding Spirit Award, October 18, 2015

Presentations:

- "Early Breast Cancer—Positive Sentinel Node after Mastectomy: Dissect or Irradiate?" Breast Surgery International, Bangkok, Thailand, August 24, 2015
- Moderator, "Adjuvant Therapy for Breast Cancer," Breast Surgery International, Bangkok, Thailand, August 25, 2015

Katharine Yao, MD

- Chair, NAPBC Quality Improvement and IT Committee
- *Annals of Surgical Oncology*, Breast Oncology Editorial Board
- Distinguished Service Award—Specialty Care, NorthShore University HealthSystem Medical Group
- Excellence in Research Award, NorthShore University HealthSystem Scientific Society
- Clinical Professor of Surgery, Pritzker School of Medicine, University of Chicago

Projects/Grants:

- Germline Changes in DNA of Women Who Have Developed a Contralateral Breast Cancer. Breast and Ovarian Research Pilot, NorthShore University HealthSystem. PI: Yao, K. 5/2016-6/2017, \$50,000.
- Heterogeneity of HER2/neu Positivity in Breast Cancer and Axillary Lymph Nodes. Breast and Ovarian Research Pilot, NorthShore University HealthSystem. PI: Pesce, C. 5/2016-6/2017.
- Using Genetic Risk Scores to Assess the Efficacy of Mammography Screening among Women Diagnosed with Breast Cancer. PI: Pesce, C.
- NorthShore University HealthSystem, Pilot Research Grant Program, "Circulating Tumor DNA for Monitoring Breast Cancer." PI: Ward, J. 2016.

Research Publications 2016

Ali SM, **Hensing T**, Schrock AB, Allen J, Sanford E, Gowen K, Kulkarni A, He J, Suh JH, Lipson D, Elvin JA, Yelensky R, Chalmers Z, Chmielecki J, Peled N, Klempner SJ, Firozvi K, Frampton GM, Molina JR, Menon S, Brahmer JR, MacMahon H, Nowak J, Ou SH, Zauderer M, Ladanyi M, Zakowski M, Fischbach N, Ross JS, Stephens PJ, Miller VA, Wakelee H, Ganesan S, Salgia R. Comprehensive Genomic Profiling Identifies a Subset of Crizotinib-Responsive ALK-Rearranged Non-Small Cell Lung Cancer Not Detected by Fluorescence In Situ Hybridization. *Oncologist*. 2016 Jun; 21(6):762-70. doi: 10.1634/theoncologist.2015-0497. Epub 2016 May 31. PMID: 27245569

Baker MS, Sharpe SM, **Talamonti MS**, Wang E, Roggin KK, Bentrem DJ, **Winchester DJ**, **Marsh RD**, **Stocker SJ**. The Learning Curve Is Surmountable: In Reply to Fong and Colleagues. *J Am Coll Surg*. 2016 Feb; 222(2):210-1. doi: 10.1016/j.jamcollsurg.2015.11.005. PMID: 26809388

Bellavance E, Peppercorn J, Kronsberg S, Greenup R, Keune J, Lynch J, Collyar D, Magder L, Tilburt J, Hlubocky F, **Yao K**. Surgeons' Perspectives of Contralateral Prophylactic Mastectomy. *Ann Surg Oncol*. 2016 Sep; 23(9):2779-87. doi: 10.1245/s10434-016-5253-9. Epub 2016 May 11. PMID: 27169770

Bianchi-Frias D, Basom R, Delrow JJ, Coleman IM, Dakhova O, Qu X, Fang M, **Franco OE**, Ericson NG, Bielas JH, **Hayward SW**, True L, Morrissey C, Brown L, Bhowmick NA, Rowley D, Ittmann M, Nelson PS. Cells Comprising the Prostate Cancer Microenvironment Lack Recurrent Clonal Somatic Genomic Aberrations. *Mol Cancer Res* 14, 374-384. PMID: 26753621

Boughey JC, Attai DJ, Chen SL, Cody HS, Dietz JR, Feldman SM, Greenberg CC, Kass RB, Landercasper J, Lemaire V, MacNeill F, Song DH, Staley AC, Wilke LG, Willey SC, **Yao KA**. Contralateral Prophylactic Mastectomy (CPM) Consensus Statement from the American Society of Breast Surgeons: Additional Considerations and a Framework for Shared Decision Making. *Ann Surg Oncol*. 2016 Jul 28. [Epub ahead of print] PMID: 27469118

Boughey JC, Attai DJ, Chen SL, Cody HS, Dietz JR, Feldman SM, Greenberg CC, Kass RB, Landercasper J, Lemaire V, MacNeill F, Song DH, Staley AC, Wilke LG, Willey SC, **Yao KA**, Margenthaler JA. Contralateral Prophylactic Mastectomy (CPM) Consensus Statement from the American Society of Breast Surgeons: Data on CPM Outcomes and Risks. *Ann Surg Oncol* 2016 Jul 28. [Epub ahead of print] PMID: 27469117

Burnside ES, Drukker K, Li H, Bonaccio E, Zuley M, Ganott M, Net JM, Sutton EJ, Brandt KR, Whitman GJ, Conzen SD, Lan L, **Ji Y**, Zhu Y, Jaffe CC, Huang EP, Freymann JB, Kirby JS, Morris EA, Giger ML. Using computer-extracted image phenotypes from tumors on breast magnetic resonance imaging to predict breast cancer pathological stage. *Cancer*. 2016 Mar 1;122(5):748-57. doi: 10.1002/cncr.29791. Epub 2015 Nov 30. PMID: 26619259

Campbell NP, **Hensing TA**, **Bhayani MK**, **Shaikh AY**, **Brockstein BE**. Targeting pathways mediating resistance to anti-EGFR therapy in squamous cell carcinoma of the head and neck. *Expert Rev Anticancer Ther*. 2016 Aug; 16(8):847-58. doi: 10.1080/14737140.2016.1202116. Epub 2016 Jul 11. PMID: 27400139

Capuano A, Bucciotti F, Farwell KD, Davis BT, Mroske C, **Hulick PJ**, Weissman SM, Gao Q, Spessotto P, Colombatti A, Doliana R. Diagnostic exome sequencing identifies a novel gene, EMILIN1, associated with autosomal dominant hereditary connective tissue disease. *Hum Mutat*. 2016 Jan;37(1):84-97. doi: 10.1002/humu.22920. Epub 2015 Nov 4. PMID: 26462740

Chan D, **Ward E**, **Lapin B**, **Marschke M**, **Thomas M**, **Lund A**, **Chandar M**, **Glunz C**, **Anderson V**, **Ochoa P**, **Davidson J**, **Icayan L**, **Wang E**, **Bellam S**, **Obel J**. Outpatient Advance Care Planning Internal Medicine Resident Curriculum: Valuing Our Patients' Wishes. *J Palliat Med*. 2016 Jul;19(7):734-45. doi: 10.1089/jpm.2015.0313. Epub 2016 May 31. PMID: 27244093

Chandar M, **Brockstein B**, Zunamon A, **Silverman I**, Dlouhy S, **Ashlevitz K**, **Tabachow C**, **Lapin B**, **Ewigman B**, **Mazzone T**, **Obel J**. Perspectives of Health-Care Providers Toward Advance Care Planning in Patients With Advanced Cancer and Congestive Heart Failure. *Am J Hosp Palliat Care*. 2016 Mar 2. pii: 1049909116636614. [Epub ahead of print] PMID: 26941370

Chen H, Liu X, **Brendler CB**, Ankerst DP, Leach RJ, Goodman PJ, Lucia MS, Tangen CM, Wang L, Hsu FC, Sun J, Kader AK, Isaacs WB, **Helfand BT**, **Zheng SL**, Thompson IM, Platz EA, **Xu J**. Adding genetic risk score to family history identifies twice as many high-risk men for prostate cancer: Results from the prostate cancer prevention trial. *Prostate*. 2016 Sept; 76(12):1120-9. doi: 10.1002/pros.23200. [Epub ahead of print] PMID: 27197965

Chugh R, Griffith KA, Davis E, Thomas DG, Zavala J, Metko C, **Brockstein B**, Undevia S, Schuetze SM. Doxorubicin plus the IGF1R-1 Antibody Cixutumumab in Soft Tissue Sarcoma: A Phase 1/2 Study Using the TITE/CRM Model. *Ann Oncol*. 2015 Jul;26(7):1459-64 Epub ahead of print. PMID: 25858498

Cohen A, **Lapin B**, **Wang CH**, **Helfand B**, Victorson D, **Novakovic K**. Variation in Testosterone Levels and Health-Related Quality of Life in Men Diagnosed With Prostate Cancer on Active Surveillance. *Urology*. 2016 May 11. pii: S0090-4295(16)30152-2. doi: 10.1016/j.urolgy.2016.03.056. [Epub ahead of print] PMID: 27179775

Conran CA, **Brendler CB**, **Xu J**. Personalized prostate cancer care: From screening to treatment. *Asian J Androl*. 2016 Jul-Aug; 18(4):505-8. doi: 10.4103/1008-682X.179529. [Epub ahead of print] PMID: 27184548

Conran CA, Na R, Chen H, Jiang D, Lin X, **Zheng SL**, **Brendler CB**, **Xu J**. Population-standardized genetic risk score: the SNP-based method of choice for inherited risk assessment of prostate cancer. *Asian J Androl*. 2016 Jul-Aug; 18(4): 520-4. doi: 10.4103/1008-682X.179527. [Epub ahead of print] PMID: 27080480

de la Hoya M, Soukari O, López-Perolito I...**Hulick PJ**...Spurdle AB. Combined genetic and splicing analysis of BRCA1 c.[594-2A>C; 641A>G] highlights the relevance of naturally occurring in-frame transcripts for developing disease gene variant classification algorithms. *Hum Mol Genet*. 2016 Mar 23. pii: ddw094. [Epub ahead of print] PMID: 27008870

De Souza JA, Yap BJ, Wroblewski K, Blinder V, Araujo FS, Hlobocky FJ, Nicholas LH, O'Connor JM, **Brockstein B**, Ratain MJ, Daugherty CK, Cella D. Comprehensive Score for Financial Toxicity. *Cancer*. 2016 online.

Dizon DS, Krilov L, Cohen E, Gangadhar T, Ganz PA, **Hensing TA**, Hunger S, Krishnamurthi SS, Lassman AB, Markham MJ, Mayer E, Neuss M, Pal SK, Richardson LC, Schilsky R, Schwartz GK, Spriggs DR, Villalona-Calero MA, Villani G, Masters G. Clinical Cancer Advances 2016: Annual Report on Progress Against Cancer From the American Society of Clinical Oncology. *J Clin Oncol*. 2016 Mar 20; 34(9):987-1011. doi: 10.1200/JCO.2015.65.8427. Epub 2016 Feb 4. PMID: 26846975

Dunnenberger HM, **Khandekar JD**. Value of Personalized Medicine. *JAMA*. 2016 Feb 9; 315(6):612-3. doi: 10.1001/jama.2015.17130. PMID: 26864419

Dunning AM, Michailidou K, Kuchenbaecker KB...**Hulick PJ**...Edwards SL. Breast cancer risk variants at 6q25 display different phenotype associations and regulate ESR1, RMND1 and CCDC170. *Nat Genet*. 2016 Apr;48(4):374-86. doi: 10.1038/ng.3521. Epub 2016 Feb 29. PMID: 26928228

Ezewuiro O, Grushko TA, Kocherginsky M, Habis M, **Hurteau JA**, Mills KA, Hunn J, Olopade OI, Fleming GF, Romero IL. Association of Metformin Use with Outcomes in Advanced Endometrial Cancer Treated with Chemotherapy. *PLoS One*. 2016 Jan 20; 11(1):e0147145. doi: 10.1371/journal.pone.0147145. eCollection 2016.

Franco OE, Tyson DR, Konvinse KC, Udyavar AR, Estrada L, Quaranta V, **Crawford SE**, **Hayward SW**. Altered TGF- β signaling drives cooperation between breast cancer cell populations. *Faseb J*. (in press) 2016 Jul 6. pii: fj.201500187RR. [Epub ahead of print] PMID: 27383183

Guo W, **Ji Y** and Catenacci D. A Subgroup Cluster Based Bayesian Adaptive Design for Precision Medicine. *Biometrics*. (in press)

Haab BB, Huang Y, Balasenthil S, Partyka K, Tang H, Anderson M, Allen P, Sasson A, Zeh H, **Kaul K**, Kletter D, Ge S, Bern M, Kwon R, Blasutig I, Srivastava S, Frazier ML, Sen S, Hollingsworth MA, Rinaldo JA, Killary AM, Brand RE. Definitive characterization of CA 19-9 in early-stage pancreatic cancer patients using a reference set of serum and plasma specimens. *PLoS One*. 2015 Oct 2;10(10):e0139049. doi: 10.1371/journal.pone.0139049. eCollection 2015

Han Y, Rand KA, Hazelett DJ, Ingles SA, Kittles RA, Strom SS, Rybicki BA, Nemesure B, Isaacs WB, Stanford JL, Zheng W, Schumacher FR, Berndt SI, Wang Z, Xu J, Rohland N, Reich D, Tandon A, Pasaniuc B, Allen A, Quinque D, Mallick S, Notani D, Rosenfeld MG, Jayani RS, Kolb S, Gapstur SM, Stevens VL, Pettaway CA, Yeboah ED, Tettey Y, Birtwum RB, Adjei AA, Tay E, Truelove A, Niwa S, Chokkalingam AP, John EM, Murphy AB, Signorello LB, Carpten J, Leske MC, Wu SY, Hennis AJ, Neslund-Dudas C, Hsing AW, Chu L, Goodman PJ, Klein EA, **Zheng SL**, Witte JS, Casey G, Lubwama A, Pooler LC, Sheng X, Coetzee GA, Cook MB, Chanock SJ, Stram DO, Watya S, Blot WJ, Conti DV, Henderson BE, Haiman CA. Prostate Cancer Susceptibility in Men of African Ancestry at 8q24. *J Natl Cancer Inst*. 2016 Jan 27;108(7). pii: djv431. doi: 10.1093/jnci/djv431. Print 2016 Jul. PMID: 26823525

Helfand BT. A comparison of genetic risk score with family history for estimating prostate cancer risk. *Asian J Androl*. 2016 Jul-Aug; 18(4):515-9. doi: 10.4103/1008-682X.177122. [Epub ahead of print]

Helfand BT, **Kearns J**, **Conran C**, **Xu J**. Clinical validity and utility of genetic risk scores in prostate cancer. *Asian J Androl*. 2016 Jul-Aug; 18(4):509-14. doi: 10.4103/1008-682X.182981. [Epub ahead of print] Review.

Ho GY, **Zheng SL**, Cushman M, Perez-Soler R, Kim M, Xue X, Wang T, Schlecht NF, Tinker L, Rohan TE, Wassertheil-Smoller S, Wallace R, Chen C, **Xu J**, Yu H. Associations of Insulin and IGFBP-3 with Lung Cancer Susceptibility in Current Smokers. *J Natl Cancer Inst*. 2016 Apr 12;108(7). pii: djw012. doi: 10.1093/jnci/djw012. Print 2016 Jul. PMID: 27071409

Howard M, **Sisco M**, **Yao K**, Sener S. Patient satisfaction with nipple-sparing mastectomy: A prospective study of patient reported outcomes using the BREAST-Q. *J Surg Oncol*. 2016;114(4):416.

Howard MA, **Sisco M**, **Yao K**, **Winchester DJ**, **Barrera E**, **Warner J**, **Jaffe J**, **Hulick P**, **Kuchta K**, **Pusic AL**, Sener SF. Patient satisfaction with nipple-sparing mastectomy: A prospective study of patient reported outcomes using the BREAST-Q. *J Surg Oncol*. 2016 Jul 8. doi: 10.1002/jso.24364. [Epub ahead of print] PMID: 27393183

Hunn J, Tenney ME, Tergas AI, Bishop EA, Moore K, Watkin W, **Kirschner C**, **Hurteau J**, **Rodriguez GC**, Lengyel E, Lee NK, Yamada SD. Patterns and utility of routine surveillance in high grade endometrial cancer. *Gynecol Oncol*. 2015 Jun; 137(3):485-9. doi: 10.1016/j.ygyno.2015.03.047. Epub 2015 Mar 30.

- Hurteau JA**, Febbraro T. Germ cell tumors: Treatment consensus across all age groups through MaGIC [Malignant Germ Cell International Collaborative]. *Cancer*. 2016 Jan 15; 122(2):181-3. doi: 10.1002/cncr.29729. Epub 2015 Oct 20. No abstract available. PMID: 26485495
- In H, **Kantor O**, Sharpe SM, **Baker MS**, **Talamonti MS**, Posner MC. Adjuvant Therapy Improves Survival for T2N0 Gastric Cancer Patients with Sub-Optimal Lymphadenectomy. *Ann Surg Oncol*. 2016 Jun;23(6):1956-62. doi: 10.1245/s10434-015-5075-1. Epub 2016 Jan 11. PMID: 26753752
- Kantor O**, **Pesce C**, **Liederbach E**, **Wang CH**, **Winchester DJ**, **Yao K**. Surgery and hormone therapy trends in octogenarians with invasive breast cancer. *Am J Surg*. 2016 Mar;211(3):541-5. doi: 10.1016/j.amjsurg.2015.11.005. Epub 2015 Dec 21. PMID: 26768954
- Kantor O**, **Talamonti MS**, **Stocker SJ**, **Wang CH**, **Winchester DJ**, **Bentrem DJ**, **Prinz RA**, **Baker MS**. A Graded Evaluation of Outcomes Following Pancreaticoduodenectomy with Major Vascular Resection in Pancreatic Cancer. *J Gastrointest Surg*. 2016 Feb;20(2):284-92. PMID: 26493974
- Katz MH, Shi Q, Ahmad SA, Herman JM, **Marsh Rde W**, Collisson E, Schwartz L, Frankel W, Martin R, Conway W, Truty M, Kindler H, Lowy AM, Bekaii-Saab T, Philip P, **Talamonti M**, Cardin D, LoConte N, Shen P, Hoffman JP, Venook AP. Preoperative Modified FOLFIRINOX Treatment Followed by Capecitabine-Based Chemoradiation for Borderline Resectable Pancreatic Cancer: Alliance for Clinical Trials in Oncology Trial A021101. *JAMA Surg*. 2016 Aug 17; 151(8):e161137. doi: 10.1001/jama-surg.2016.1137. Epub 2016 Aug 17. PMID: 27275632
- Larson NB, McDonnell S, Albright LC, Teerlink C, Stanford J, Ostrander EA, Isaacs WB, **Xu J**, Cooney KA, Lange E, Schleutker J, Carpten JD, Powell I, Bailey-Wilson J, Cusenot O, Cancel-Tassin G, Giles G, MacInnis R, Maier C, Whittmore AS, Hsieh CL, Wiklund F, Catalona WJ, Foulkes W, Mandal D, Eeles R, Kote-Jarai Z, Ackerman MJ, Olson TM, Klein CJ, Thibodeau SN, Schaid DJ. Post Hoc Analysis for Detecting Individual Rare Variant Risk Associations Using Probit Regression Bayesian Variable Selection Methods in Case-Control Sequencing Studies. *Genet Epidemiol*. 2016 Jun 17. doi: 10.1002/gepi.21983. [Epub ahead of print] PMID: 27312771
- Lee J, Mueller P, Sengupta S, Gulukota K, and **Ji Y**. Bayesian inference for intra-tumor heterogeneity in mutations and copy number variation. *Journal of the Royal Statistical Society: Series C. Applied Statistics*. 2016. 65(4):547-563.
- Lee J, Thall P, **Ji Y**, Mueller P. A Decision-Theoretic Phase I-II Design for Ordinal Outcomes in Two Cycles. *Biostatistics*. 2016. 17(2):304-319. PMID: 26553915
- Lennon FE, Cianci GC, Cipriani NA, **Hensing TA**, Zhang HJ, Chen CT, Murgu SD, Vokes EE, Vannier MW, Salgia R. Lung cancer—a fractal viewpoint. *Nat Rev Clin Oncol*. 2015 Nov; 12(11):664-75. doi: 10.1038/nrclinonc.2015.108. Epub 2015 Jul 14. Review. PMID: 26169924
- Li H**, **Zhu Y**, **Burnside ES**, **Drukker K**, **Hoadley KA**, **Fan C**, **Conzen SD**, **Whitman GJ**, **Sutton EJ**, **Net JM**, **Ganott M**, **Huang E**, **Morris EA**, **Perou CM**, **Ji Y**, **Giger ML**. MR Imaging Radiomics Signatures for Predicting the Risk of Breast Cancer Recurrence as Given by Research Versions of MammaPrint, Oncotype DX and PAM50 Gene Assays. *Radiology*. 2016 May 5;152110. [Epub ahead of print] PMID: 27144536
- Li J, Woods SL, Healey S...**Hulick PJ**...Chenevix-Trench G. Point Mutations in Exon 1B of APC Reveal Gastric Adenocarcinoma and Proximal Polyposis of the Stomach as a Familial Adenomatous Polyposis Variant. *Am J Hum Genet*. 2016 May 5;98(5):830-42. doi: 10.1016/j.ajhg.2016.03.001. Epub 2016 Apr 14. PMID: 27087319
- Liederbach E**, **Lewis CM**, **Yao K**, **Brockstein BE**, **Wang CH**, **Lufti W**, **Bhayani MK**. A Contemporary Analysis of Surgical Trends in the Treatment of Squamous Cell Carcinoma of the Oropharynx from 1998 to 2012: A Report from the National Cancer Database. *Ann Surg Oncol*. 2015 Dec; 22(13):4422-31. doi: 10.1245/s10434-015-4560-x. Epub 2015 Apr 17.
- Lindquist KJ, Paris PL, Hoffmann TJ, Cardin NJ, Kazma R, Mefford JA, Simko JP, Ngo V, Chen Y, Levin AM, Chitale D, **Helfand BT**, Catalona WJ, Rybicki BA, Witte JS. Mutational Landscape of Aggressive Prostate Tumors in African American Men. *Cancer Res*. 2016 Apr 1;76(7):1860-8. doi: 10.1158/0008-5472.CAN-15-1787. Epub 2016 Feb 26. PMID: 26921337
- Liu W**. DNA alterations in the tumor genome and their associations with clinical outcome in prostate cancer. *Asian J Androl*. 2016 Jul-Aug; 18(4): 533-542. doi: 10.4103/1008-682X.177120 PMID: 26975494
- Liu W**, **Xu J**. Translation of genomics and epigenomics in prostate cancer: Progress and promising directions. *Asian J Androl*. 2016 Jun 3. doi: 10.4103/1008-682X.182820. [Epub ahead of print] PMID: 27270344
- Lufti W, **Talamonti MS**, **Kantor O**, **Wang CH**, **Liederbach E**, **Stocker SJ**, **Bentrem DJ**, **Roggin KK**, **Winchester DJ**, **Marsh R**, **Prinz RA**, **Baker MS**. Perioperative chemotherapy is associated with a survival advantage in early stage adenocarcinoma of the pancreatic head. *Surgery*. 2016 Sep;160(3):714-24. doi: 10.1016/j.surg.2016.05.029. Epub 2016 Jul 12. PMID: 27422328
- Meeks HD, Song H, Michailidou K...**Hulick PJ**...Goldgar DE. BRCA2 Polymorphic Stop Codon K3326X and the Risk of Breast, Prostate and Ovarian Cancers. *J Natl Cancer Inst*. 2015 Nov 19;108(2). pii: djv315. doi: 10.1093/jnci/djv315. Print 2016 Feb. PMID: 26586665
- For more information, visit northshore.org/cancer or call (847) 570-2112
- Miller ME, Kyriolos A, **Yao K**, **Kantor O**, Tseng J, **Winchester DJ**, Shulman LN. Utilization of Axillary Surgery for Patients with Ductal Carcinoma In Situ: A Report from the National Cancer Data Base. *Ann Surg Oncol*. 2016 Jun 22. [Epub ahead of print] PMID: 27334212
- Mitra R, Mueller P, **Ji Y**. Bayesian graphical models for differential pathways. *Bayesian Analysis*. 2016. 11(1):99-124.
- Mitra R, Mueller P, **Ji Y**. Bayesian Multiplicity Control for Graphs. *Canadian Journal of Statistics* (In press).
- Moffitt RA, Marayati R, Flate EL, Volmar KE, Loeza SG, Hoadley KA, Rashid NU, Williams LA, Eaton SC, Chung AH, Smyla JK, Anderson JM, Kim HJ, Bentrem DJ, **Talamonti MS**, Iacobuzio-Donahue CA, Hollingsworth MA, Yeh JJ. Virtual microdissection identifies distinct tumor- and stroma-specific subtypes of pancreatic ductal adenocarcinoma. *Nat Genet*. 2015 Oct;47(10):1168-78. doi: 10.1038/ng.3398. Epub 2015 Sep 7. PMID: 26343385
- Mueller JJ, Holzapfel M, Han CH, Santos K, Gunderson C, Moore K, Erickson B, Leath CA 3rd, **Diaz E**, Walsh C, Wethington SL, Dejbakhsh SZ, Barakat RR, Gardner GJ, Hyman DM, Soslow RA, Leitao MM Jr. Staging Lymphadenectomy in Patients with Clear Cell Carcinoma of the Ovary. *Int J Gynecol Cancer*. 2016 Jan; 26(1):120-4. PMID: 26509849
- Na R, Wu Y, Ding Q, **Xu J**. Clinically available RNA profiling tests of prostate tumors: Utility and comparison. *Asian J Androl*. July-Aug 2016; 18(4): 575-579. doi: 10.4103/1008-682X.175096. PMID: 26975490
- Na R, Ye D, Qi J, Liu F, Lin X, **Helfand BT**, **Brendler CB**, **Conran C**, Gong J, Wu Y, Gao X, Chen Y, **Zheng SL**, Mo Z, Ding Q, Sun Y, **Xu J**. Race-specific genetic risk score is more accurate than non-race-specific genetic risk score for predicting prostate cancer and high-grade diseases. *Asian J Androl*. 2016 July-Aug; 18(4): 529-9. doi: 10.4103/1008-682X.179857. [Epub ahead of print] PMID: 27140652
- Nanda R, Stringer-Reasor EM, Saha P, Kocherginsky M, Gibson J, Libao B, Hoffman PC, Obeid E, **Merkel DE**, Khramtsova G, Skor M, Krausz T, Cohen RN, Ratain MJ, Fleming GF, Conzen SD. A randomized phase I trial of nanoparticle albumin-bound paclitaxel with or without mifepristone for advanced breast cancer. *SpringerPlus*. 2016 Jun 30; 5(1):947. doi: 10.1186/s40064-016-2457-1. eCollection 2016. PMID: 27386391
- Olson TA, Murray MJ, Rodriguez-Galindo C, Nicholson JC, Billmire DF, Krailo MD, Dang HM, Amatruda JF, Thornton CM, Arul GS, Stoneham SJ, Pashankar F, Stark D, Shaikh F, Gershenson DM, Covens A, **Hurteau J**, Stenning SP, Feldman DR, Grimsom PS, Huddart RA, Sweeney C, Powles T, Lopes LF, Dos Santos Agular S, Chinnaswamy G, Khaleel S, Abouelnaga S, Hale JP, Frazier AL. Pediatric and Adolescent Extracranial Germ Cell Tumors: The Road to Collaboration. *J Clin Oncol*. 2015 Sep 20; 33(27):3018-28. doi: 10.1200/JCO.2014.60.5337. Epub 2015 Aug 24. Review
- Oskvarek J, Braunstein S, Farnan J, Ferguson MK, Hahn O, Henderson T, Hong S, Levine S, **Rosenberg CA**, Golden DW. Medical Student Knowledge of Oncology and Related Disciplines: A Targeted Needs Assessment. *J Cancer Educ*. 2016 Sept 3; 1(3): 529-32 doi: 10.1007/s13187-015-0876-2
- Penson DF, Lin DW, Karsh L, Quinn DI, **Shevrin DH**, Shore N, Symanowski JT, Brown B, Forer D, Wong EK, Flanders SC. Treatment registry for outcomes in patients with castration-resistant prostate cancer (TRUMPET): A methodology for real-world evidence and research. *Future Oncol*. 2016 Aug 16. [Epub ahead of print] PMID: 27528114
- Robinson PA, Weldon CV, Garcia SM, **Rosenberg CA**, Boecher S, Trosman JR, Macias J, Berardi R, Hyde LJ, Perez CB, Subramian S, Penedo FH. Assessment of concerns and distress during the survivorship summary of care plan appointment. Abstract e21558; 2016 ASCO Annual Meeting. *J Clin Oncol*. 34,2016 (suppl;abstr e21558)
- Rosenberg CA**, **Flanagan C**, **Brockstein B**, **Obel JC**, **Dragon LH**, **Merkel DE**, **Wade EL**, **Law TM**, **Khandekar JD**, **Hensing TA**. Promotion of self-management for post treatment cancer survivors: Evaluation of a risk-adapted visit. *J Cancer Surviv*. 2016 Feb; 10(1):206-19. doi: 10.1007/s11764-015-0467-6. Epub 2015 Jul 16. PMID: 26178325
- Selkirk CG**, **Helfand BT**. To PSA or not to PSA? Still a question for men with a family history of prostate cancer. *BJU Int*. 2016 Apr;117(4):545. doi: 10.1111/bju.13372. PMID: 26969030
- Sengupta S, Zhou T, Mueller P, and **Ji Y**. A Bayesian Nonparametric Model for Reconstructing Tumor Subclones Based on Mutation Pairs. *PSB*. 2016 Vol. 21, p.393.
- Shah S**, **Ward JE**, **Bao R**, **Hall CR**, **Brockstein BE**, **Luke JJ**. Clinical Response of a Patient to Anti-PD-1 Immunotherapy and the Immune Landscape of Testicular Germ Cell Tumors. *Cancer Immunology Research*. Published Online Sept 16 2016.
- Sharpe SM, **Talamonti MS**, **Wang CE**, **Prinz RA**, **Roggin KK**, **Bentrem DJ**, **Winchester DJ**, **Marsh RD**, **Stocker SJ**, **Baker MS**. Early national experience with laparoscopic pancreaticoduodenectomy for ductal adenocarcinoma: A comparison of laparoscopic pancreaticoduodenectomy and open pancreaticoduodenectomy from the National Cancer Data Base. *J Am Coll Surg*. 2015 Jul;221(1):175-84. doi: 10.1016/j.jamcollsurg.2015.04.021. PMID: 26095569

(continued)

Shevrin DH. Genomic predictors for treatment of late-stage prostate cancer. *Asian J Androl*. 2016 Jul-Aug; 18(4):586-91. doi: 10.4103/1008-682X.177121. PMID: 27030083

Shi Y, Du M, Fang Y, Tong N, Zhai X, Sheng X, Li Z, Xue Y, Li J, Chu H, **Chen J**, Song Z, Shen J, Ji J, Li X, Hu Z, Shen H, **Xu J**, Wang M, Zhang Z. Identification of a novel susceptibility locus at 16q23.1 associated with childhood acute lymphoblastic leukemia in Han Chinese. *Hum Mol Genet*. 2016 Apr 19. pii: ddw112. [Epub ahead of print] PMID: 27094129

Silvestri V, Barrowdale D, Mulligan AM...**Hulick PJ**...Ottini L. Male breast cancer in BRCA1 and BRCA2 mutation carriers: Pathology data from the Consortium of Investigators of Modifiers of BRCA1/2. *Breast Cancer Res*. 2016 Feb 9;18(1):15. doi: 10.1186/s13058-016-0671-y. PMID: 26857456

Sisco M, Yao KA. Nipple-sparing mastectomy: A contemporary perspective. *J Surg Oncol*. 2016 Jun;113(8):883-90. doi: 10.1002/jso.24209. Epub 2016 Mar 1. Review. PMID: 26931641

Smith TR, Kearney E, **Hulick PJ**, Kisor DF. History repeats itself: The family medication history and pharmacogenomics. *Pharmacogenomics*. 2016 May;17(7):669-78. doi: 10.2217/pgs-2015-0015. Epub 2016 May 4. PMID: 27143300

Soto Chervin C, Brockstein B. Current clinical immunotherapeutic approaches for head and neck cancer. *F1000Res*. 2016 May 5;5. pii: F1000 Faculty Rev-803. doi: 10.12688/f1000research.7762.1. eCollection 2016. Review. PMID: 27239282

Stacey SN, Kehr B, Gudmundsson J, Zink F, Jonasdottir A, Gudjonsson SA, Sigurdsson A, Halldorsson BV, Agnarsson BA, Benediktsson KR, Aben KK, Vermeulen SH, Cremers RG, Panadero A, **Helfand BT**, Cooper PR, Donovan JL, Hamdy FC, Jinga V, Okamoto I, Jonasson JG, Tryggvadottir L, Johannsdottir H, Kristinsdottir AM, Masson G, Magnusson OT, Iordache PD, Helgason A, Helgason H, Sulem P, Gudbjartsson DF, Kong A, Jonsson E, Barkardottir RB, Einarsson GV, Rafnar T, Thorsteinsdottir U, Mates IN, Neal DE, Catalona WJ, Mayordomo JL, Kiemeny LA, Thorleifsson G, Stefansson K. Insertion of an SVA-E retrotransposon into the CASP8 gene is associated with protection against prostate cancer. *Hum Mol Genet*. 2016 Mar 1;25(5):1008-18. doi: 10.1093/hmg/ddv622. Epub 2016 Jan 5. PMID: 26740556

Steensma DP, Abedi M, Bejar R, Cogle CR, Foucar K, Garcia-Manero G, George TI, **Grinblatt D**, Komrokji R, Ma X, Maciejewski J, Polyea DA, Savona MR, Scott B, Sekeres MA, Thompson MA, Swern AS, Nifenecker M, Sugrue MM, Erba H. Connect MDS/AML: Design of the myelodysplastic syndromes and acute myeloid leukemia disease registry, a prospective observational cohort study. *BMC Cancer*. 2016 Aug 19;16:652. doi: 10.1186/s12885-016-2710-6. PMID: 27538433

Suman P, **Wang CH**, Abadin SS, Block R, **Raghavan V, Moo-Young TA, Prinz RA, Winchester DJ.** Timing of radioactive iodine therapy does not impact overall survival in high-risk papillary thyroid carcinoma. *Endocr Pract*. 2016 Jul;22(7):822-31. doi: 10.4158/EP151088.OR. Epub 2016 Mar 28. PMID: 27018620

Suman P, **Wang CH**, Abadin SS, **Moo-Young TA, Prinz RA, Winchester DJ.** Response to commentary on: Risk factors for central lymph node metastasis in papillary thyroid carcinoma: A National Cancer Data Base (NCDB) study. *Surgery*. 2016 May 26. pii: S0039-6060(16)30102-7. doi: 10.1016/j.surg.2016.04.020. [Epub ahead of print] PMID: 27238355

Suman P, **Wang CH**, Abadin SS, **Moo-Young TA, Prinz RA, Winchester DJ.** Risk factors for central lymph node metastasis in papillary thyroid carcinoma: A National Cancer Data Base (NCDB) study. *Surgery*. 2016 Jan;159(1):31-9. doi: 10.1016/j.surg.2015.08.032. Epub 2015 Oct 2. PMID: 26435436

Sweeney CJ, Chen YH, Carducci M, Liu G, Jarrard DF, Eisenberger M, Wong YN, Hahn N, Kohli M, Cooney MM, Dreicer R, Vogelzang NJ, Picus J, **Shevrin D**, Hussain M, Garcia JA, DiPaola RS. Chemohormonal Therapy in Metastatic Hormone-Sensitive Prostate Cancer. *N Engl J Med*. 2015 Aug 20;373(8):737-46. doi: 10.1056/NEJMoa1503747. Epub 2015 Aug 5. PMID: 26244877

Teerlink CC, Leongamornlert D, Dadaev T, Thomas A, Farnham J, Stephenson RA, Riska S, McDonnell SK, Schaid DJ, Catalona WJ, **Zheng SL**, Cooney KA, Ray AM, Zuhlke KA, Lange EM, Giles GG, Southey MC, Fitzgerald LM, Rinkleb A, Luedeke M, Maier C, Stanford JL, Ostrander EA, Kaikkonen EM, Sipeky C, Tammela T, Schleutker J, Wiley KE, Isaacs SD, Walsh PC, Isaacs WB, **Xu J**, Cancel-Tassin G, Cussenot O, Mandal D, Laurie C; PRACTICAL Consortium; International Consortium for Prostate Cancer Genetics, Thibodeau SN, Eeles RA, Kote-Jarai Z, Cannon-Albright L. Genome-wide association of familial prostate cancer cases identifies evidence for a rare segregating haplotype at 8q24.21. *Hum Genet*. 2016; Jun 4. [Epub ahead of print] PMID: 27262462

Vaishampayan U, **Shevrin D**, Stein M, Heilbrun L, Land S, Stark K, Li J, Dickow B, Heath E, Smith D, Fontana J. Phase II Trial of Carboplatin, Everolimus and Prednisone in Metastatic Castration-Resistant Prostate Cancer Pretreated with Docetaxel Chemotherapy: A Prostate Cancer Clinical Trial Consortium Study. *Urology*. 2015 Dec;86(6):1206-11. doi: 10.1016/j.urology.2015.08.008. Epub 2015 Sep 12. PMID: 26375845

Victorson D, Hankin V, Burns J, Weiland R, Maletich C, **Sufirin N**, Schuette S, Gutierrez B, **Brendler C.** Feasibility, acceptability and preliminary psychological benefits of mindfulness meditation training in a sample of men diagnosed with prostate cancer on active surveillance: Results from a randomized controlled pilot trial. *Psycho-Oncology*. 2016 May 3. doi: 10.1002/pon.4135. [Epub ahead of print] PMID: 27145355

Victorson DE, Schuette S, Schalet BD, Kundu SD, **Helfand BT, Novakovic K, Sufirin N, McGuire M, Brendler C.** Factors Affecting Quality of Life at Different Time Points since Treatment in a Sample of Men with Localized Prostate Cancer: The Unique Influence of Treatment Decision Making Satisfaction, Personality and Sexual Functioning. *J Urol*. 2016 May 31. pii: S0022-5347(16)30548-1. doi: 10.1016/j.juro.2016.05.099. [Epub ahead of print] PMID: 27259651

Vigneswaran J, Tan YH, Murgu SD, Won BM, Patton KA, Villalor VM, Hoffman PC, **Hensing T**, Hogarth DK, Malik R, MacMahon H, Mueller J, Simon CA, Vigneswaran WT, Wigfield CH, Ferguson MK, Husain AN, Vokes EE, Salgia R. Comprehensive genetic testing identifies targetable genomic alterations in most patients with non-small cell lung cancer, specifically adenocarcinoma, single institute investigation. *Oncotarget*. 2016 Apr 5; 7(14):18876-86. doi: 10.18632/oncotarget.7739. PMID: 26934441

Wang M, Gu D, Du M, Xu Z, Zhang S, Zhu L, Lu J, Zhang R, Xing J, Miao X, Chu H, Hu Z, Yang L, Tang C, Pan L, Du H, Zhao J, Du J, Tong N, Sun J, Shen H, **Xu J**, Zhang Z, Chen J. Common genetic variation in ETV6 is associated with colorectal cancer susceptibility. *Nat Commun*. 2016 May 5;7:11478. doi: 10.1038/ncomms11478. PMID: 27145994

Winchester DA, Gurel B, Till C, Goodman PJ, Tangen CM, Santella RM, Johnson-Pais TL, Leach RJ, Thompson IM, **Xu J, Zheng SL**, Lucia MS, Lippman SM, Parnes HL, Isaacs WB, Drake CG, De Marzo AM, Platz EA. Key genes involved in the immune response are generally not associated with intraprostatic inflammation in men without a prostate cancer diagnosis: Results from the prostate cancer prevention trial. *Prostate*. 2016 May;76(6):565-74. doi: 10.1002/pros.23147. Epub 2016 Jan 15. PMID: 26771888

Won B, Carey GB, Tan YH, **Bokhary U**, Itkonen M, Szeto K, Wallace J, **Campbell N, Hensing T**, Salgia R. The Chicago Thoracic Oncology Database Consortium: A Multisite Database Initiative. *Cureus*. 2016 Mar 16;8(3):e533. doi: 10.7759/cureus.533. PMID: 27092293

Wood K, **Hensing T**, Malik R, Salgia R. Prognostic and Predictive Value in KRAS in Non-Small-Cell Lung Cancer: A Review. *JAMA Oncol*. 2016 Jun 1; 2(6):805-12. doi: 10.1001/jamaoncol.2016.0405. PMID: 27100819

Yang Y, Xu W, Neill T, Hu Z, Wang CH, Xiao X, Stock SR, Guise T, Yun CO, **Brendler CB**, Izzo RV, **Seth P.** Systemic delivery of an oncolytic adenovirus expressing decorin for the treatment of breast cancer bone metastases. *Hum Gene Ther*. 2015;26(12):813-25.

Yao K, Bolkora J, Bedrosian I, Rosenberg S, **Sisco M, Barrera E**, Kyriillos A, Tilburt J, **Wang C, Rabbitt S, Pesce C**, Simovic S, **Winchester DJ**, Sepucha K. Impact of an In-Visit Decision Aid on Patient Knowledge about Contralateral Prophylactic Mastectomy: A Pilot Study. *Ann Surg Oncol*. (accepted).

Yao K, Bolkora J, **Sisco M**, Rosenberg S, Bedrosian I, **Liederbach E, Wang C.** Survey of the Deficits in Surgeons' Knowledge of Contralateral Prophylactic Mastectomy. *JAMA Surg*. 2016 Apr 1;151(4):391-3. doi: 10.1001/jamasurg.2015.3601. PMID: 26606424

Yao K, Goldschmidt R, **Turk M**, Wesseling J, Stork-Sloots L, de Snoo F, Cristofanilli M. Molecular subtyping improves diagnostic stratification of patients with primary breast cancer into prognostically defined risk groups. *Breast Cancer Res Treat*. 2015 Nov;154(1):81-8. doi: 10.1007/s10549-015-3587-9. Epub 2015 Sep 30. PMID: 26424167

Yao K, Liederbach E, Lutfi W, **Wang CH**, Hou N, Karrison T, Huo D. Increased utilization of postmastectomy radiotherapy in the United States from 2003 to 2011 in patients with one to three tumor positive nodes. *J Surg Oncol*. 2015 Dec;112(8):809-14. doi: 10.1002/jso.24071. Epub 2015 Oct 20. PMID: 26486998

Yao K, Sisco M, Bedrosian I. Contralateral prophylactic mastectomy: Current perspectives. *Int J Womens Health* 2016 Jun 22;8:213-23. doi: 10.2147/IJWH.S82816. eCollection 2016. Review. PMID: 27382334

Yu GP, Na R, Ye DW, Qi J, Liu F, Chen HT, Wu YS, Zhang GM, Sun JL, Zhu Y, Huang LQ, Ren SC, Jiang DK, **Zheng SL**, Jiang HW, Sun YH, Ding Q, **Xu J.** Performance of the Prostate Health Index in predicting prostate biopsy outcomes among men with a negative digital rectal examination and transrectal ultrasonography. *Asian J Androl*. 2016 Mar 15. doi: 10.4103/1008-682X.172823. [Epub ahead of print] PMID: 26975483

Zhang N, Wu Y, Gong J, Li K, Lin X, Chen H, Yu Y, Gou Y, Hou J, Jiang D, Na R, Wang X, Ding Q, **Xu J.** Germline genetic variations in PDZD2 and ITPR2 genes are associated with clear cell renal cell carcinoma in Chinese population. *Oncotarget*. 2016 Jan 14. doi: 10.18632/oncotarget.6917. [Epub ahead of print] PMID: 26918600

Zureikat AH, Postlewait LM, Liu Y, Gillespie TW, Weber SM, Abbott DE, Ahmad SA, Maithel SK, Hogg ME, Zenati M, Cho CS, Saleem A, Xia B, Steve J, Nguyen TK, Keshava HB, Chalikonda S, Walsh RM, **Talamonti MS, Stocker SJ**, Bentrem DJ, Lumpkin S, Kim HJ, Zeh HJ 3rd, Kooby DA. A Multi-Institutional Comparison of Perioperative Outcomes of Robotic and Open Pancreaticoduodenectomy. *Ann Surg*. 2016 Jul 18. [Epub ahead of print] PMID: 27433907

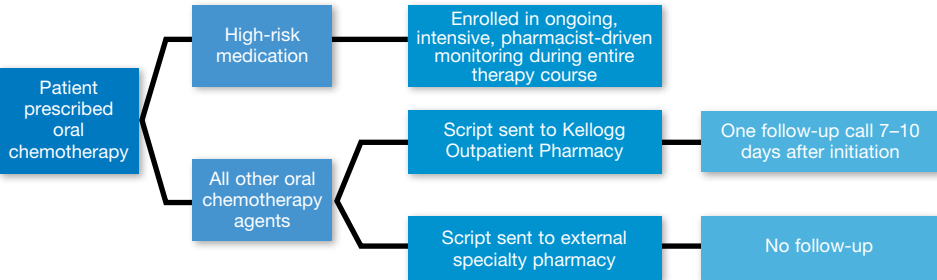
Outcomes Study: Utilization of an Electronic Patient Portal for Oral Chemotherapy Monitoring in an Outpatient Oncology Center

Over the past decade, there has been an exponential growth in the availability of oral chemotherapy agents on the market. In 2015, 10 new oral chemotherapy drugs were placed on the market, compared to only three in 2014. Prescribing patterns at NorthShore have also increased dramatically, as the number of oral chemotherapy prescriptions has increased by almost 200 percent from 2007 to 2014. Oral chemotherapy medications pose a unique set of challenges, as these regimens are often complex, expensive, and associated with severe adverse drug reactions (ADRs) and drug-drug/drug-food interactions.

The American Society of Clinical Oncology's Quality Oncology Practice Initiative (QOPI) was launched in 2010 to help mitigate these risks. QOPI has a specific set of standards for measuring quality care related to oral chemotherapy, which includes defining a plan for ongoing monitoring for adherence and toxicity. These oral chemotherapy standards require ongoing and intensive follow-up, which is very labor-intensive.

Various workflow scenarios for oral chemotherapy are depicted to the right.

- The first scenario represents our oral chemotherapy monitoring pilot project. Drugs with the highest risk for toxicity and non-adherence are targeted, and patients on these regimens are provided a follow-up call seven to 10 days after initiating treatment and receive ongoing follow-up every cycle. Providing the intensive follow-up outlined in this scenario is the ultimate goal and would help provide the most optimal care for patients on oral chemotherapy. However, this workflow is very labor-intensive, as there are approximately 450 to 500 prescriptions reviewed every month.
- In the second scenario, a prescription is sent to the specialty outpatient pharmacy at Kellogg Cancer Center. The staffing pharmacist reviews the prescription, ensuring safety and appropriateness, provides initial education upon dispensing the medication, and conducts a follow-up call seven to 10 days after treatment initiation.
- In the third scenario, the prescription is sent to an outside pharmacy resulting in inconsistent follow-up and minimal documentation. The prescription is reviewed for safety and appropriateness, but the outside pharmacy is unlikely to provide any follow-up to assess adherence or side effects.



We have developed a drug-specific electronic patient assessment tool, or survey, which was integrated into the Electronic Medical Record (EMR) system via the patient portal, NorthShoreConnect. The end goal for the survey is to reach more patients while minimizing workload.

Capecitabine was chosen for this initial phase due to its toxicities, risk for non-adherence and prescription frequency. A 16-item electronic survey was designed to assess adherence issues and toxicities.

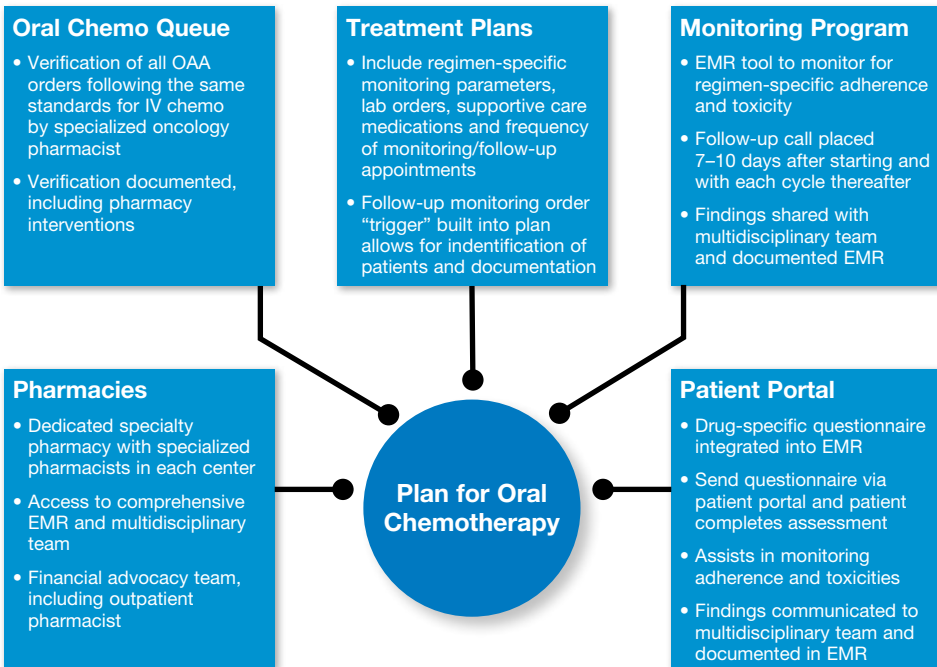
The questionnaire was distributed directly to patients in two phases:

- **Phase 1:** The survey was sent via secure email while we awaited the final build and integration into the EMR. This was a cumbersome process for the patient, and the response rate was extremely low. Seventeen patients received the electronic questionnaire via secure email for a total of 22 individual cycles. None of the patients completed the survey, resulting in 100 percent of patients requiring a follow-up call. At least one ADR was reported during 16 (72.7 percent) of these follow-up calls. Pharmacist intervention was required for 10 (45.5 percent) of these follow-ups, with the majority of interventions including patient education and side effect management.
- **Phase 2:** After full implementation, the survey was sent via NorthShoreConnect. This process was less complicated and resulted in a much higher response rate. The survey was sent to 28 patients for a total of 42 individual cycles. The response rate was 67 percent. The number

of required follow-up calls decreased from 100 percent to approximately 85 percent. During the majority of follow-up calls (76.2 percent), the pharmacist identified at least one ADR and 22 interventions. The majority of interventions included patient education or side effect management.

This initiative shows that using NorthShoreConnect increases the ability to provide more efficient follow-up for patients. We are working to simplify the questionnaire to encourage an increased

response rate; to expand the service to additional oral chemotherapy agents; and to automate the questionnaire (a) to be sent automatically when the drug order is signed, (b) to trigger an alert to the pharmacist when there is an "abnormal response," and (c) to reach more patients. In conjunction with our other quality improvement projects shown below, we believe we can improve adherence and timely management of treatment-related toxicities for patients on oral chemotherapy.



2015 Cancer Data Summary

Incidence of Cancer 2015

In 2015, 4,062 new cancer cases were accessioned into the NorthShore University HealthSystem (NorthShore) Cancer Registry. Of those, 3,793 cases (93.4 percent) were analytic. By definition, analytic cases are those patients newly diagnosed with malignant neoplasm and/or have received all or part of their first course of treatment at one of our hospitals. The remaining 269 cases (6.6 percent) were non-analytic. Non-analytic cases are patients initially diagnosed and treated at another facility who now are receiving treatment for progression or recurrence of their disease at NorthShore.

Details by site are provided in Table 1.

Class of Case 2015

Class of Case divides cases into two groups, analytic cases (Class 00-22) and non-analytic cases (Class 30-49).

Class 00-14, which account for 3,259 cases, were those malignancies diagnosed at one of our four hospitals. Once diagnosed with cancer, 3,032 (93 percent) of our patients remained at NorthShore for their treatment. Class 20-22, totaling 534 cases were diagnosed elsewhere and referred here for treatment. Class 30-40, a total of 269 cases, were diagnosed and treated elsewhere and referred here for treatment of a recurrence or progression of disease.

Overall Top 5 NorthShore Sites 2015

Breast cancer continues to be our top site representing 20 percent of the total cases seen at NorthShore. The next most frequent cancers seen were: prostate (10 percent), lung (8 percent), melanoma (6 percent) and lymphoma (5 percent). These top five sites represent 49 percent of all newly diagnosed cases.

Table 1: Incidence of Cancer—2015 Data Summary

Primary Site	Analytic	Non-Analytic	Total	Percentage
ORAL CAVITY & PHARYNX	77	3	80	2%
Lip	2	0	2	0%
Tongue	25	0	25	1%
Salivary Glands	7	2	9	0%
Floor of Mouth	5	0	5	0%
Gum & Other Mouth	12	1	13	0%
Nasopharynx	1	0	1	0%
Tonsil	8	0	8	0%
Oropharynx	9	0	9	0%
Hypopharynx	7	0	7	0%
Other Oral Cavity & Pharynx	1	0	1	0%
DIGESTIVE SYSTEM	592	27	619	15%
Esophagus	39	1	40	1%
Stomach	55	7	62	2%
Small Intestine	25	6	31	1%
Colon Excluding Rectum	160	4	164	4%
Rectum & Rectosigmoid	80	1	81	2%
Anus, Anal Canal & Anorectum	14	4	18	0%
Liver & Intrahepatic Bile Duct	46	1	47	1%
Gallbladder	10	0	10	0%
Other Biliary	26	1	27	1%
Pancreas	127	2	129	3%
Retroperitoneum	2	0	2	0%
Peritoneum, Omentum & Mesentery	3	0	3	0%
Other Digestive Organs	5	0	5	0%
RESPIRATORY SYSTEM	363	8	371	9%
Nose, Nasal Cavity & Middle Ear	4	0	4	0%
Larynx	21	1	22	1%
Lung & Bronchus	336	7	343	8%
Trachea, Mediastinum & Other Resp Orgs	2	0	2	0%
BONES & JOINTS	3	0	3	0%
SOFT TISSUE	24	5	29	1%
SKIN EXCL BASAL & SQUAMOUS	258	9	267	7%
Melanoma—Skin	237	7	244	6%
Other Non-Epithelial Skin	21	2	23	1%
BASAL & SQUAMOUS SKIN	0	30	30	1%
BREAST	786	30	816	20%
FEMALE GENITAL SYSTEM	223	33	256	6%
Cervix Uteri	16	1	17	0%
Corpus & Uterus, NOS	140	3	143	4%
Ovary	39	3	42	1%
Vagina	2	4	6	0%
Vulva	15	21	36	1%
Other Female Genital Organs	11	1	12	0%
MALE GENITAL SYSTEM	393	46	439	11%
Prostate	374	44	418	10%
Testis	17	2	19	0%
Penis	2	0	2	0%
URINARY SYSTEM	263	19	282	7%
Urinary Bladder	163	13	176	4%
Kidney & Renal Pelvis	90	6	96	2%
Ureter	8	0	8	0%
Other Urinary Organs	2	0	2	0%
EYE & ORBIT	6	0	6	0%
BRAIN & OTHER NERVOUS SYSTEMS	175	16	191	5%
Brain	40	8	48	1%
Cranial Nerves, Other Nervous Systems	135	8	143	4%
ENDOCRINE SYSTEM	208	16	224	6%
Thyroid	155	11	166	4%
Other Endocrine Including Thymus	53	5	58	1%
LYMPHOMA	177	7	184	5%
Hodgkin Lymphoma	14	0	14	0%
Non-Hodgkin Lymphoma	163	7	170	4%
MYELOMA	32	0	32	1%
LEUKEMIA	114	11	125	3%
Lymphocytic Leukemia	66	8	74	2%
Myeloid & Monocytic Leukemia	45	3	48	1%
Other Leukemia	3	0	3	0%
MESOTHELIOMA	4	0	4	0%
KAPOSI SARCOMA	5	0	5	0%
MISCELLANEOUS	90	9	99	2%
Total	3,793	269	4,062	100%

Oncology Conferences

Breast Cancer Conferences

NorthShore Evanston Hospital
Kellogg Room G868, Mondays, 7:30 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Colorectal Cancer Conference

NorthShore Evanston Hospital
Kellogg Room G868
2nd and 4th Fridays, 7 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Genitourinary Cancer Conferences

NorthShore Evanston Hospital
Kellogg Room G868
1st and 3rd Thursdays, 5:30 p.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Gynecology Cancer Conferences

NorthShore Evanston Hospital
Kellogg Room G868, Thursdays, 7 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Head and Neck Cancer Conferences

NorthShore Evanston Hospital
Kellogg Room G868,
1st and 3rd Thursdays, 8 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Hematology/Pathology Conferences

NorthShore Evanston Hospital
Pathology Conference Room 1923
Wednesdays, 8:30 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Hepatic Biliary Pancreatic Cancer Conferences

NorthShore Evanston Hospital
Kellogg Room G868, Tuesdays, 7 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Molecular Oncology Conferences

NorthShore Evanston Hospital
Kellogg Room 4818, 2nd Monday, 7 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Neuro-Oncology Cancer Conferences

NorthShore Evanston Hospital
Kellogg Room G868
2nd and 4th Wednesdays, 7:30 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Sarcoma/Melanoma Conferences

NorthShore Evanston Hospital
Kellogg Room G868
1st and 3rd Wednesdays, 8 a.m.
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Thoracic Cancer Conferences

NorthShore Evanston Hospital
Kellogg Room G868, Tuesdays, noon
NorthShore Glenbrook and Highland Park
Hospitals Videocast

Physician Teams

Brain & Spine/ Neurologic

Julian E. Bailes, MD
Shakeel Chowdhry, MD
Ryan Merrell, MD
Ricky Wong, MD

Breast

Ermilo Barrera, MD
Michael Howard, MD
Lawrence Krause, MD
Teresa Murray Law, MD
Barbara Loris, MD
Douglas Merkel, MD
Catherine Pesce, MD
Mark Sisco, MD
Elaine Lee Wade, MD
James Ward, MD
David J. Winchester, MD
Katharine Yao, MD

Endocrine

Janardan Khandekar, MD
Tricia Moo-Young, MD
Richard Prinz, MD
David J. Winchester, MD

Gastrointestinal

(Colon, Esophageal,
Liver, Pancreatic, Stomach)

Matthew Adess, MD
Marshall Baker, MD
John Linn, MD
Robert Marsh, MD
Joseph Muldoon, MD
Jennifer Obel, MD
James Spitz, MD
Mark Talamonti, MD
Michael Ujiki, MD

Genitourinary

(Bladder, Kidney,
Prostate, Testicular)

Michael Blum, MD
Charles Brendler, MD
Peter Colegrove, MD
Britt Hanson, DO
Brian Helfand, MD, PhD
Thomas Keeler, MD
Teresa Murray Law, MD
Michael McGuire, MD
Kristian Novakovic, MD
Sangtae Park, MD, MPH
Ariel Polish, MD
Daniel Shevrin, MD
James Ward, MD

Gynecologic

(Cervical, Endometrial/
Uterine, Ovarian, Vaginal)

Jean Hurteau, MD
Mary Tilley Jenkins
Vogel, MD
Carolyn Kirschner, MD
Elena Moore, MD
Gustavo Rodriguez, MD

Head & Neck

(Larynx, Mouth,
Throat, Thyroid)

Mihir Bhayani, MD
Bruce Brockstein, MD
Nicholas Campbell, MD
Aaron Friedman, MD
Thomas Hensing, MD
Cheryl Nocon, MD
Michael Shinnars, MD
Joseph Raviv, MD
Ricky Wong, MD

Hematology

(Leukemia,
Lymphoma, Myeloma)

Matthew Adess, MD
Alla Gimelfarb, MD
David Grinblatt, MD
Britt Hanson, DO
Jagoda Jasielec, MD
Lynne Kaminer, MD
Ariel Polish, MD

Lung/Thoracic

Nicholas Campbell, MD
Alla Gimelfarb, MD
Thomas Hensing, MD
Ki Wan Kim, MD
Seth Krantz, MD
Ariel Polish, MD

Medical Genetics

Peter Hulick, MD
Andrew Melnyk, MD

Melanoma/ Skin Cancer

Ermilo Barrera, MD
Bruce Brockstein, MD
Britt Hanson, DO
Ross Levy, MD
Gregg Menaker, MD
Bernhard Ortel, MD
Jason Waldinger, MD
David J. Winchester, MD
Katharine Yao, MD

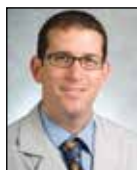
Radiation/Oncologists

William Bloomer, MD
Ranjeev Nanda, MD
Vathsala Raghavan, MD
Arif Shaikh, MD

Sarcoma/Bone

Ermilo Barrera, MD
Bruce Brockstein, MD
Mark Talamonti, MD
David J. Winchester, MD

Physician Directory



Matthew Adess, MD
Medical Director, Highland Park
Kellogg Cancer Center
Expertise: GI Oncology; Benign
and Malignant Hematology
Locations: GBK, GR, HPK



Marc Alonzo, MD
Expertise: Interventional Radiology
Locations: EH, GB, HP



Thomas Aquisto, MD
Expertise: Interventional Radiology
Location: EH



Julian E. Bailes, MD
Chair, Department of Neurosurgery
Co-Director, NorthShore
Neurological Institute
Expertise: Brain and Spine Tumor
Surgery
Locations: EVS, HPS



Marshall Baker, MD, MBA
Expertise: Pancreatic Cancer and
Disease Management; Liver and
Biliary Surgery; Oncologic Surgery;
General Surgery
Locations: EVS, GBM, VH



Ermilo Barrera, MD
Expertise: Breast Cancer and
Disease Management; Melanoma;
Sarcoma
Locations: GBB, GBM



Mihir Bhayani, MD
Expertise: Head and Neck
Cancers
Locations: EVK, NMB, VH



William Bloomer, MD
Chair, Department of
Radiation Oncology
Expertise: Breast Cancer; Prostate
Cancer; Lung and Gastrointestinal
Cancer
Locations: EH, HP



Michael Blum, MD
Expertise: Urologic Oncology;
Sexual Dysfunction; Infertility
Locations: EV, HPS



Charles Brendler, MD
Executive Research Director
Program for Personalized
Cancer Care
Expertise: Prostate Cancer
and Prostate Health
Location: GB



Bruce Brockstein, MD
Division Head,
Hematology/Oncology
Medical Director, Kellogg Cancer
Center
Expertise: Head and Neck;
Melanoma; Sarcoma
Locations: EVK, HPK



Nicholas Campbell, MD
Expertise: Lung Cancer;
Esophageal Cancer; Head and
Neck Cancers
Locations: EVK, HPK



Shakeel Chowdhry, MD
Expertise: Brain and Spine Tumor
Surgery; Stereotactic
Radiosurgery
Locations: EVS, GB



Peter Colegrove, MD
Expertise: Sexual Dysfunction;
Urologic Oncology; Incontinence;
Prostate Health
Locations: EVS, GB



Hector Ferral, MD
Expertise: Interventional Radiology
Location: EH



Aaron Friedman, MD
Expertise: Benign and Malignant
Laryngeal Tumors; Vocal Cord
Cancer
Locations: EVS, NMB



Alla Gimelfarb, MD
Expertise: Benign and Malignant
Hematology
Location: GBK



David Grinblatt, MD
Expertise: Benign and Malignant
Hematology
Locations: EVK, GBK



Britt Hanson, DO
Expertise: Melanoma; Genitourinary
Cancer; Benign and Malignant
Hematology
Locations: GR, HPK



Brian Helfand, MD, PhD
Expertise: Prostate Cancer;
Benign Prostatic Hyperplasia;
Laparoscopic Surgery; Robotic
Assisted Surgery; Laser Surgery
Locations: GB, GR, HP



Thomas Hensing, MD
Medical Director, Evanston
Kellogg Cancer Center
Deputy Division Head
Hematology/Oncology
Expertise: Lung Cancer;
Esophageal Cancer; Head
and Neck Cancers
Locations: EVK, GBK



Michael Howard, MD
Expertise: Plastic Surgery;
Breast Reconstruction
Location: NMB



Peter Hulick, MD, MMSc
Division Head, Medical Genetics
Director, Center for Personalized
Medicine
Expertise: Medical Genetics
Locations: EVS, HPK



Jean Hurteau, MD
Expertise: Cervix Cancer;
Endometrial Cancer; Fallopian
Tube Cancer; Ovarian Cancer;
Uterine Cancer; Vaginal Cancer
Locations: EVK, HPK, SK



Jagoda Jasielec, MD
Expertise: Benign and Malignant
Hematology
Locations: EVK, SK



Mary Tilley Jenkins Vogel, MD
Expertise: Gynecologic Oncology
Locations: EVK, GBK, HPK



Lynne Kaminer, MD
Division Head, Hematology
Expertise: Benign and Malignant
Hematology
Locations: EVK, GBK



Thomas Keeler, MD
Expertise: Urolithiasis; Urologic Oncology; Incontinence
Locations: EVS, GB



Janardan Khandekar, MD
Director, Center for Molecular Medicine
Expertise: Endocrine; Breast Cancer
Location: EVK



Ki Wan Kim, MD
Expertise: Lung Cancer; Esophageal Cancer; Minimally Invasive Thoracic Surgery
Locations: GBK, SK



Carolyn Kirschner, MD
Expertise: Gynecologic Oncology
Locations: EVK, GBK



Seth Krantz, MD
Expertise: Lung Cancer; Esophageal Cancer; Minimally Invasive Thoracic Surgery
Locations: GBK, HPK, GR



Lawrence Krause, MD
Expertise: Breast Health; Breast Disease and Surgery
Locations: CH, HPB, SK



Ross Levy, MD
Expertise: Mohs Surgery; Dermatologic Surgery; Laser Surgery; Cosmetic Surgery; Liposuction
Location: SKM



John Linn, MD
Expertise: Gastrointestinal and Foregut Surgery; Weight Loss Surgery
Locations: DP, EVS, GBM



Teresa Murray Law, MD
Expertise: Breast Cancer; Prostate Cancer; Genitourinary Cancer
Locations: EVK, GR, HPK



Barbara Loris, MD
Expertise: Breast Health; Breast Disease and Surgery; General Surgery
Locations: GR, HPB, HPS, VH



Robert Marsh, MD
Expertise: GI Oncology
Locations: EVK, GBK



Michael McGuire, MD
Division Head, Urology
Expertise: Prostate Cancer; Bladder Cancer; Kidney Cancer; Testis Cancer
Locations: EV, GB



Andrew Melnyk, MD
Division Head, Medical Genetics
Expertise: Medical Genetics
Locations: EVS, HPK



Gregg Menaker, MD
Expertise: Mohs Surgery; Dermatologic Surgery; Laser Surgery; Cosmetic Surgery; Liposuction
Location: SKM



Douglas Merkel, MD
Expertise: Breast Cancer
Locations: EVK, GBK, HPK



Ryan Merrell, MD
Program Director, Neuro-Oncology
Expertise: Brain Cancer; Brain Tumor; Neurologic Complications of Cancer; Tumor in the Central Nervous System (Brain or Spine)
Locations: EVK, GBK, HPK



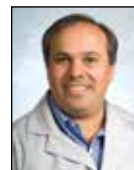
Tricia Moo-Young, MD
Expertise: Minimally Invasive Approaches to Endocrine Disorders; Thyroid and Parathyroid Surgery; Adrenal Disorders; Pancreatic Exocrine; Cancer and Disease Management
Locations: HPS, SK, VH



Elena Diaz Moore, MD
Expertise: Cervical Cancer; Endometrial Cancer; Fallopian Tube Cancer; Ovarian Cancer; Uterine Cancer; Vaginal Cancer; Vulvar Cancer
Locations: EVK, HPK



Joseph Muldoon, MD
Expertise: Minimally Invasive Colon and Rectal Surgery; Colon and Rectal Cancer; Inflammatory Bowel Disease; General Surgery
Locations: EVS, GBK, GBM



Ranjeev Nanda, MD
Expertise: Stereotactic Radiosurgery; Brain Tumors; Head and Neck Cancers
Locations: EH, GBH



Cheryl Nocon, MD
Expertise: Head and Neck Cancer; Thyroid/Parathyroid Disease; Microvascular Reconstruction
Locations: EVS, NMB, SK, VH



Kristian Novakovic, MD
Expertise: Kidney Cancer; Prostate Cancer; Minimally Invasive Techniques: Advanced Laparoscopy and daVinci Robot
Locations: GB, HP, VH



Jennifer Obel, MD
Expertise: GI Oncology; Breast Cancer
Locations: EVK, GBK



Bernhard Ortel, MD
Division Head, Dermatology
Expertise: Skin Cancer, General Dermatology, Psoriasis, Blistering Diseases
Location: SKM



Sangtae Park, MD, MPH
Expertise: Single-Port Laparoscopic Surgery; Robotic Surgery; Urolithiasis; Urologic Oncology
Locations: EVS, GB



Catherine Pesce, MD
Director, Surgical Breast Program
Expertise: Breast Cancer; Breast Health; Breast Disease and Surgery
Locations: HPB, HPK, EVK



Ariel Polish, MD
Expertise: GI Oncology, Benign and Malignant Oncology; Genitourinary Cancer; Lung Cancer; Hematology/Oncology
Locations: GBK, GR

(continued)

Physician Directory, continued



Richard Prinz, MD
Vice Chair, Administration,
Department of Surgery
Expertise: Endocrine Surgery;
Thyroid, Parathyroid, and Pancreatic
Surgery and Management; Biliary
and General Surgery
Locations: EVS, HPS, MP



Vathsala Raghavan, MD
Expertise: Breast Cancer;
Gynecologic Oncology; Head and
Neck Cancers; Thyroid Cancer
Locations: GBH, HPH



Joseph Raviv, MD
Expertise: Endoscopic Skull Base
Surgery
Locations: EVS, NMB



Gustavo Rodriguez, MD
Division Head,
Gynecologic Oncology
Expertise: Gynecologic Oncology
Location: EVK



Carol Rosenberg, MD
Director Preventive Health
Initiatives; Director Living in the
Future (LIFE) Cancer Survivorship
Program
Expertise: Cancer Survivorship
Location: HPH



Arif Shaikh, MD
Expertise: Stereotactic
Radiosurgery; Head and Neck
Cancers; Lung Cancer;
Gynecologic and Breast Tumors
Locations: EH, GBH



Daniel Shevrin, MD
Medical Director, Glenbrook
Kellogg Cancer Center
Expertise: Prostate Cancer;
Genitourinary Cancer
Locations: EVK, GBK



Michael Shinnars, MD
Expertise: Otolaryngology;
Skull Base Surgery
Location: EVS, NMB



Mark Sisco, MD
Division Head, Plastic and
Reconstructive Surgery
Expertise: Plastic Surgery;
Breast Reconstruction
Location: NMB



James Spitz, MD
Expertise: Colon and Rectal
Surgery; Colonoscopy;
General Surgery
Locations: GBM, SK, VH



Mark Talamonti, MD
Department Chair, Surgery
Expertise: Gastrointestinal Surgical
Oncology; Pancreatic Cancer;
Primary and Metabolic Liver Tumors;
Neuroendocrine Tumors; Foregut
Cancers of the Esophagus
Location: EVK



Leslie Mendoza Temple, MD
Expertise: Integrative Medicine
Location: GP



Michael Ujiki, MD
Division Head, General Surgery
Expertise: General Surgery; Weight
Loss Surgery; Minimally Invasive
Surgery; Laparoscopic Surgery;
Endoscopic Revisional Surgery
Locations: EVS, GBM



Elaine Lee Wade, MD
Expertise: Breast Cancer;
Benign Hematology
Locations: EVK, GBK



Jason Waldinger, MD
Expertise: Skin Cancer, General
Dermatology, Laser Procedures
Locations: HPK, HPM



James Ward, MD
Expertise: Breast Cancer;
Genitourinary Cancer
Locations: EVK, HPM



David J. Winchester, MD
Associate Director for Surgical
Specialties, Kellogg Cancer Center
Expertise: Surgical Oncology with
Emphasis on Breast, Endocrine,
Melanoma and Sarcoma
Locations: EVB, EVS, GB, GBB



Ricky Wong, MD
Expertise: Brain, Skull and
Pituitary Tumors
Locations: EVS, GB



Katharine Yao, MD
Chief, Division of Surgical
Oncology
Expertise: Breast Cancer;
Breast Health; Breast Disease
and Surgery; Melanoma
Location: EVB, EVK

Locations

Chicago Lake Shore Medical Office (CH)
680 North Lake Shore Drive, Suite 924
Chicago, IL 60611

Evanston Breast Center (EVB)
2650 Ridge Avenue, Evanston, IL 60201

Evanston Hospital (EH)
2650 Ridge Avenue, Evanston, IL 60201

Evanston Kellogg Cancer Center (EVK)
2650 Ridge Avenue, Evanston, IL 60201

Evanston Specialty Suites (EVS)
1000 Central Street, Evanston, IL 60201

Glenbrook Breast Center (GBB)
2050 Pfingsten Road, Suite 130
Glenview, IL 60026

Glenbrook Hospital (GBH)
2100 Pfingsten Road, Glenview, IL 60026

**Glenbrook John and Carol Walter
Ambulatory Care Center (GB)**
2180 Pfingsten Road, Glenview, IL 60026

Glenbrook Kellogg Cancer Center (GBK)
2180 Pfingsten Road, Suite 1000
Glenview, IL 60026

Glenbrook Medical Building (GBM)
2050 Pfingsten Road, Suite 128
Glenview, IL 60026

Glenview Park Center (GP)
2400 Chestnut Avenue, Glenview, IL 60026

Gurnee Ambulatory Care Center (GR)
7900 Rollins Road, Gurnee, IL 60031

Highland Park Ambulatory Care Center (HPS)
757 Park Avenue West, Highland Park, IL 60035

Highland Park Breast Center (HPB)
777 Park Avenue West, Suite B400
Highland Park, IL 60035

Highland Park Hospital (HPH)
777 Park Avenue West, Room 1260
Highland Park, IL 60035

Highland Park Kellogg Cancer Center (HPK)
757 Park Avenue West, Suite 1810
Highland Park, IL 60035

Highland Park Medical Building (HP)
767 Park Avenue West, Suite B100
Highland Park, IL 60035

Highland Park Medical Office (HPM)
1160 Park Avenue West, Suite 1-North,
Highland Park, IL 60035

Lake Bluff Medical Building (LB)
71 Waukegan Road, Suite 700
Lake Bluff, IL 60044

Mount Prospect Medical Building (MP)
1329 Wolf Road, Mount Prospect, IL 60056

Northbrook Medical Building (NMB)
501 Skokie Boulevard, Northbrook, IL 60062

NorthShore Medical Group (HPM)
1160 Park Avenue West, Suite 1N
Highland Park, IL 60035

NorthShore Medical Group (SKM)
9933 Woods Drive, Suite 200, Skokie, IL 60077

Skokie Ambulatory Care Center (SK)
9650 Gross Point Road, Suite 3000
Skokie, IL 60076

Vernon Hills Specialty Suites (VH)
225 North Milwaukee Avenue
Vernon Hills, IL 60061

The Importance of Philanthropy at Kellogg Cancer Center

More than 30 years ago, the Kellogg family helped establish the Kellogg Cancer Center through a transformational gift, and generous support from our patients and their families continues to help shape Kellogg Cancer Center into the premier care provider it is today.

Thank You to All Our Supporters

Donations play a vital role in every aspect of care, especially our support services. Kellogg Cancer Center patients benefit from a broad array of support services designed to give them peace of mind and crucial support, so they can focus on the most important task at hand—healing. The Psychosocial Oncology Program was created in 1998 through contributions from Susan Harris’s family and friends, who are committed to supporting this essential program. Donations from these and other generous supporters are essential to our comprehensive and personalized care.

Here are a few of the many ways that philanthropic donations make an impact:

- \$20,000 supports part of our medical hematology/oncology fellowship program for one year.
- \$15,000 ensures that nearly 200 patients receive psychosocial support, offering assistance with both emotional and practical needs.
- \$10,000 provides nearly 100 patients with nurse navigation services, giving cancer patients a partner in treatment and crucial support.
- \$5,000 expands the curriculum and opportunities for innovative nursing education for 60 nurses.
- \$2,000 helps cover the costs associated with a patient’s clinical research team. Our clinical research team ensures that NorthShore patients have access to and can enroll in the latest clinical trials.
- \$600 provides seven patients with nutritional services throughout their treatment.
- \$100 adds important support for our patient-centered programs.

“Charitable giving is a crucial factor in our ability to provide comprehensive, compassionate care to individual patients and their families. We would not be able to do what we do each and every day without generous support for our programs.”

Bruce Brockstein, MD, Medical Director, NorthShore Kellogg Cancer Center Head, Division of Hematology/Oncology Kellogg-Scanlon Chair of Oncology

Patients with cancer undergo a great deal of stress. The often debilitating treatments affect patients’ physical and emotional well-being and at times contribute to financial challenges. Thanks to our generous donors, we are able to offer patients the assistance needed to ensure optimal quality of life while being treated.

The Cless family are among these generous donors. The grants provided through The Cless Family Patient Assistance Fund make a direct impact on patients whose cancer has negatively affected their financial situation. Many times, patients are forced to quit their jobs or go on disability or already are living on a fixed income. Because of the Cless family’s generosity, Kellogg Cancer Center is able to provide direct financial assistance to patients during this challenging time in their lives.



Kellogg Cancer Center patient and donor Gerhard Cless established The Cless Family Patient Assistance Fund which provides vital support for other oncology patients.

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Evanston, Illinois 60201
(847) 570-2000

Glenbrook Hospital
2100 Pfingsten Road
Glenview, Illinois 60026
(847) 657-5800

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777 Park Avenue West
Highland Park, Illinois 60035
(847) 432-8000

Skokie Hospital
9600 Gross Point Road
Skokie, Illinois 60076
(847) 677-9600

Medical Group
1301 Central Street
Evanston, Illinois 60201
(847) 570-5235

Foundation
1033 University Place, Suite 450
Evanston, Illinois 60201
(224) 364-7200

Research Institute
1001 University Place
Evanston, Illinois 60201
(224) 364-7100

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EDITOR: Amy Ferguson, Assistant
Vice President, Integrated Marketing
and Corporate Communications
PHOTOGRAPHY: Jon Hillenbrand



1301 Central Street
Evanston, Illinois 60201

northshore.org

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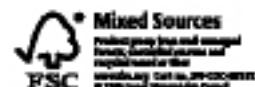
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* All academic affiliations are with the University of Chicago Pritzker School of Medicine

For more information, please visit northshore.org/cancer or call (847) 570-2112